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ABSTRACT

This report provides an overview of study findings and a summary of each of the more than 35 research projects which make up the whole NIE Compensatory Education Study. General information on each of the projects is provided, as well as specific references to more detailed discussions. The studies included are divided into five major areas: (1) funds allocation; (2) services; (3) student development; (4) administration; and (5) a special archive project. Information concerning the purpose, methodology and findings of each particular study is provided. (EB)

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THE COMPENSATORY EDUCATION STUDY: MAJOR RESEARCH PROJECTS

A Supplemental Report from
The National Institute of Education

September 1978

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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PREFACE

The Compensatory Education Study was requested by Congress in the 1974 Elementary and Secondary Education Amendments. The 1974 Amendments emphasize the direct responsibility of the National Institute of Education (NIE) to Congress. The study began in February 1975 only after Congress had reviewed an official research plan submitted by NIE; it was funded with $15 million specially set aside from the Title I program appropriation. Interim reports on study findings were submitted to Congress in December 1976 and September 1977. A final report will be submitted in September 1978.

This volume provides an overview of study findings and a summary of each of the more than 35 research projects which make up the whole Compensatory Education Study. These summaries provide both general information on each of the projects and specific references to where more detailed discussions can be found.

The overview was prepared by Richard Moss of the Compensatory Education Study and Timothy McCarthy of the Publications Management and Administrative Services Division. Managing and editing of project summaries was done by Janet Taylor, Peirce Hammond, and Marjorie Kulash. Special thanks are due to Catherine Blacknall for her aid in collecting and typing the material.

Joy A. Frechtling, Director
Compensatory Education Study

OVERVIEW OF THE NIE COMPENSATORY EDUCATION STUDY

Compensatory education is one of the Nation's most important efforts to equalize educational opportunity. The concept stems from the recognition that children from disadvantaged backgrounds frequently do not enjoy the same educational benefits as their peers. Many attend schools in districts that have low overall revenues or high concentrations of disadvantaged families. Such circumstances place special strains on the schools and adversely affect the general development of pupils. Compensatory education is intended to ease those problems by providing disadvantaged children with additional services to help them complete their education on more equal terms.

The main impetus to compensatory education came from Title I of the Elementary and Secondary Education Act of 1965 (ESEA), subtitled "an Act to strengthen and improve educational quality and educational opportunities." The most important source of compensatory education funds, Title I has channeled billions of Federal dollars to States and school districts for compensatory programs.

Congress had three purposes in mind when it enacted Title I. First, it sought to provide additional financial assistance to school districts serving large numbers of students from low-income families and to the schools with the greatest number of such students. Second, Congress sought to fund special services for low-achieving children in schools with low revenue levels. And third, Congress intended Title I programs to contribute to the cognitive, social, and emotional development of participating students.

Since 1965, the Federal Government has provided between $1 billion and $2 billion a year to States and local educational agencies for compensatory education programs. Representing 34% of all Federal expenditures in elementary and secondary education, Title I is the largest Federal education program for young students. While Title I accounts for only 3% of the total monies spent nationally on elementary and secondary education, in some of the Nation's poorest school districts it accounts for almost one-third of their per-pupil expenditures.

The amount of money that a school district receives under Title I depends on the number of children age 5 to 17 whose families live under the poverty line, the number of children receiving Aid to Families with Dependent Children (AFDC), and the number of children in federally supported foster homes or institutions for neglected or delinquent children. Within the district, Federal regulations also direct Title I monies to schools in the poorest areas.

In writing the enabling legislation, Congress chose to give States and school districts wide latitude in establishing local compensatory education programs. For example, a 1974 Senate report notes that "local officials are charged with developing local solutions to meet their specific needs."

The school districts take the initiative in designing local programs and in identifying which students are to receive special services. Compensatory education funds are most frequently used for special instruction, but local communities also may use monies for such auxiliary services as food, medical care, and psychological counseling.

THE NIE STUDY

The impetus for the National Institute of Education (NIE) study came from the Education Amendments of 1974 (Public Law 93-380), which directed the Institute to conduct a comprehensive study of compensatory education programs, including those financed by the States. Congress requested this 3-year study in order to gather information which would help them in considering legislation to reauthorize Title I.

In requesting the study, Congress essentially wanted answers to two questions. First, what

have compensatory education programs accomplished over the last decade? Second, how can compensatory education programs be improved?

To answer the first question, the NIE study examined whether existing Title I programs have met the original intentions of Congress.

To determine how compensatory education might be improved, NIE researchers investigated the relative effectiveness of different state and local approaches to implementing Title I. They studied the relationships between improved academic performance and such elements of instruction as individualized learning and class size. Researchers also considered the possible effect of other methods of allocating funds (on the basis of achievement test scores, for example), and they examined alternative ways of organizing Federal, state, and local efforts to make compensatory programs work better.

Earlier national evaluations of Title I often focused solely on children's academic performance. More recent selective evaluations tended to isolate reading programs and measure the impact of compensatory education by gauging the effectiveness of reading instruction. However, Title I's ultimate success depends upon its ability to distribute funds and deliver services to its eligible students. Consequently, Congress has shown strong interest in learning who benefits from Title I funds and services.

NIE's examination of Title I was designed to enable Congress to judge whether the program has met each of three objectives: the allocation of funds, the delivery of services, and the development of children.

The overall NIE study consisted of 35 major research projects. These projects included a National Survey of Compensatory Education, special demonstration projects in 13 school districts, and a number of detailed case studies of particular aspects of the Title I program. In accordance with the study's mandate, NIE submitted an interim report in 1976 and a second report--actually a series of six reports--in the fall of 1977. Other reports will be issued in the fall of 1978.

RESEARCH FINDINGS

Title I's Effectiveness in Distributing Money

NIE gathered information on whether Title I funds are actually distributed as Congress intended. The original legislation specified that funds were intended to help districts provide services to areas with concentrations of low-income families. The number of children living in poverty would determine the amount of money a district received and also the eligibility of a particular school for funds.

At the same time, Congress decided that funds should be spent only for children who were clearly low achieving. School administrators and teachers select children at the individual school level on the basis of their educational needs. Until Title I resources reach the school, the focus is on family income; thereafter it is on student achievement.

NIE's analysis of the distributional effects of the Title I formula indicates that the formula generally meets the purpose intended by Congress: Title I directs funds to areas with concentrations of children from low-income families. However, the poorest counties and districts often receive less money than do richer areas for each of the children counted for Title I purposes. This is because Title I allocations are weighted by the average per-pupil expenditure (APPE) for the State, and very poor areas are often found in low-spending States.

More specifically, NIE found that:

1. Overall, the larger the number of poor children in a district, the larger its allocation.

2. The largest proportion of Title I money is directed to central cities, rural areas, and places with high proportions of minority group children.

3. The share of Title I funds going to counties in the South and in the Middle Atlantic States is larger than the counties' share of the school-aged population. In the South, this is a result of the region's heavy concentrations of low-income children; in the Middle Atlantic States, it results both from the numbers of low-income and other formula-eligible children and from a relatively high level of educational expenditures.

4. Urban and Northeastern counties receive the most money for each formula-eligible child; rural Southern counties receive the least. This reflects the weighting of allocations according to state APPE.

5. Although Title I funding constitutes only 3% of all spending on elementary and secondary education on a national level, it may account for one-third of the funding in the very poorest school districts.

Title I and Other Education Aid

NIE compared the effectiveness of Title I with that of other Federal and state education programs that direct funds to places with the lowest income populations and the most limited tax bases. NIE sought to determine which program had the greatest effects on educational spending at the local level.

Title I aid per pupil in the lowest income school districts is 5.5 times as great as Title I aid per pupil in the highest income districts. This makes Title I aid more redistributive with respect to income than any other Federal program of education aid to jurisdictions or than state aid overall. Title I also provides slightly more money to districts with small local tax bases than to districts able to provide high levels of local spending, and it is thus more equalizing than other Federal aid within States.

Finally, NIE found that Title I is superior to other Federal or state funding programs in terms of its capacity to increase educational spending at the local level, rather than being used to replace local expenditures. A higher proportion of Title I dollars represents net additions to district expenditures than is the case with other Federal or state education aid.

At the within-district level, Title I is less focused, and the funds are not concentrated solely on the lowest income schools. There are strong pressures to increase the numbers of schools being served, and a number of procedures--some of them statutory and others embodied in regulations--have greatly increased school districts' flexibility in identifying schools to receive Title I services. Though each of the sources of flexibility can be seen as desirable in itself, taken together they greatly reduce the concentration of Title I funds.

Alternative Funding Formulas

NIE was asked to consider whether or not other definitions of poverty would lead to a better method of allocating resources to the schools. The current formula could be revised by raising the level of poverty upwards or by tying it to average family income. Today, a family of four is considered poor when it lives on an income of $5,800. This figure could be adjusted so that poverty is defined as 125% or 150% of the current index, or as 50% of median family income.

NIE examined the implications of these and other proposed changes for Title I funding. It concluded that if Congress raised the poverty level, the proportion of those now identified as poor in large cities and in the South would decline. This, in turn, would mean that these areas would receive less Title I support.

In 1974, some members of the House of Representatives expressed considerable interest in using data from achievement test scores to allocate funds to States, school districts, and schools. NIE studied the feasibility of this approach and its probable implications. First, it looked at alternative ways to collect achievement data and the cost of doing so. Second, NIE tried to estimate where funds might be distributed if allocations were based on achievement scores. Third, NIE conducted several demonstration projects in which school districts were given waivers from the usual rules governing the allocation of funds to schools. These projects allowed NIE to observe what might happen if districts relied on achievement data in identifying eligible schools and students.

NIE's research led it to conclude that it is not possible at present to use achievement data to allocate funds to all States and districts. However, a new national testing program, which would produce enough data for achievement allocations to the States, could be ready in 3 years. Such a program would cost $7.2 million over a 3-year period. A testing program that could be used to allocate funds directly to each school district on the basis of the number of low-achieving children in the district would probably cost as much as $53 million over a 3-year period. However, the additional expenditures required for each State to allocate funds to districts on the basis of statewide tests would be far less.

NIE's analysis indicates that a change to an achievement-based allocation system would have little effect on the amounts of money received by each of the four major census regions. However, many States would experience changes in their funding. NIE estimates that 23 States would experience changes of more than 15% in their share of funds.

The data also indicate that certain kinds of school districts, such as districts with large numbers of minority students, would probably gain under an achievement-based allocation system, while nonmetropolitan areas would probably lose funds if achievement criteria were substituted for

poverty criteria. Urban and suburban districts in some areas would be likely to gain funds, while those in other areas would be likely to lose. On the average, cities and suburbs would gain, but not significantly.

DEMONSTRATION PROJECTS

The "demonstration projects," in which rules governing funds allocation were waived, involve 13 school districts for the period 1975-78. NIE was interested in learning exactly what districts might do if they were not required to allocate funds under the existing Title I framework and, particularly, what would be the effects of any decision to allocate on the basis of achievement. Districts applying for this study gave numerous reasons for wanting to waive existing regulations. Many wanted to allocate funds directly to both schools and students on the basis of educational disadvantage because they felt that the current formula denied services to some low achievers. Others wanted to continue serving students no longer eligible for services under existing rules because desegregation programs had altered attendance patterns. Still others wished to eliminate the stigma of Title I as a program for poor or minority students.

Findings from the demonstration program have led NIE to conclude that most districts could use achievement scores to allocate funds without facing any major technical problems. The change to achievement criteria, combined with more restrictive student eligibility criteria in many schools, enabled participating districts to select low-achieving children more directly than they had previously. During the demonstration, the proportion of poor children in the Title I population decreased, while the proportion of low-achieving children increased. The percentage of minority children among Title I pupils remained about the same.

For the most part, districts receiving waivers served more children, although they spent less per child. This meant an increase in the absolute numbers of poor and minority children served as well as in the number of low-achieving children. The increase in numbers of children served was substantial for all groups but most dramatic for the low-achieving group.

However, in order to serve additional children, the demonstration districts slightly reduced the intensity of services provided for each child. Although children in these districts spent less time in compensatory instruction than they had before, districts did not make fundamental changes in their approach to compensatory instruction. The nature of Title I services--the size of the instructional group and the qualifications of the teaching staff--was not altered.

Based on the research findings, it is clear that each district has a model of the "appropriate" structure of a compensatory program and resisted downgrading this model by, for example, substantially increasing group size or hiring less expensive staff. In many cases, districts used funds from sources other than the basic Title I grant in order to maintain the quality of their program. It is likely that these additional funds would not be available over an extended period of time. Therefore, if districts continued to serve increased numbers of Title I students for a number of years, the reduction in intensity of services would probably be greater than that observed in the demonstration districts.

SERVICES PROVIDED BY TITLE I FUNDING

Services to Students

Because very little detailed information was available on the nature of the services being provided by Title I funds, NIE conducted a large-scale National Survey of Compensatory Education. The results showed that 9 out of 10 school districts receive Title I funds. These funds are used mostly in elementary grades and provide compensatory education services to 20% of the Nation's elementary school students, or 6 million children. Three-fourths of the funds are used to provide instructional services. Title I programs today focus on instruction to a far greater degree than in the early days of compensatory education. School district personnel have told NIE that they believe this strong emphasis on basic skills, which is encouraged by Federal officials, is appropriate.

Title I regulations are flexible enough to permit districts to fund noninstructional services, and some local districts feel the need for compensatory education programs that can provide medical care, counseling, and food. Most districts use less than 5% of their Title I funds for such services. The only noninstructional services to receive a growing share of Title I funds are those activities related to the Parent Advisory Councils (PACs), through which parents help shape and plan Title I programs.

The NIE survey demonstrated that Title I provides important services that represent real additions to the level of educational expenditures in districts receiving funds. Districts might have used Title I funds to pay for services that they would have provided even without Title I. Since they have not done so, it seems that the requirements imposed by Title I on the schools' use of

funds have been effective in ensuring that supplementary services really are provided.

Types of Services

In examining how Title I adds to the education of participating children, NIE researchers collected information on class size, time spent in instruction, teacher qualifications, and the degree to which compensatory education instruction is individualized. While the NIE investigation covered only a limited number of districts, the results were encouraging in all four of these areas:

1. Class sizes were small, averaging 9 students in compensatory reading and 12 students in mathematics and language arts. In contrast, the regular classes attended by Title I students had an average class size of 27.

2. Compensatory education students spent an average of 5½ hours per week in special instruction. Time spent in compensatory reading instruction averaged 29% of the total instructional time. For language arts and mathematics, the equivalent figures were 22% and 27%, respectively.

3. Teachers giving compensatory instruction to students often had special training. For example, 67% of the professional teachers had graduate training beyond a bachelor's degree, and 62% specialized in one subject.

4. Many school districts attempted to individualize their instruction, although few offered instruction that could be considered individualized in all respects. Teachers' aides played an important role in Title I programs and were used to help schools provide more individualized attention to children. More than half the aides employed nationwide are paid from Title I funds.

Title I programs seem to be designed in ways that can help students achieve more in school. Title I students usually spend more time in basic skills instruction than do classmates who are not in compensatory programs. Also, they are taught in smaller groups, often by specially trained staff. On the other hand, the quality and intensity of Title I services are not uniformly high in the 14,000 school districts receiving compensatory funds. In some districts, compensatory education students receive less reading instruction than do non-Title I students. Moreover, in some districts, there is little evidence of clear planning or specific instructional goals. The absence of such planning tends to lessen Title I's effectiveness in helping children to learn.

Extent of Services

NIE found that even in school districts with well-designed and carefully managed programs, many eligible children remain unserved. The national survey found that only 66% of the children determined eligible by school districts receive services. If the Congress does not fund Title I at its full authorized level, each district's annual entitlement is reduced according to a complex formula. Lower appropriations affect the number of students served.

Because of this limited funding, most school districts can serve only children who score far below the 50th percentile in achievement. Students whose performance is just below average and who might achieve at average or above-average levels if they received special services usually are not included. Similarly, retaining children in the program after they begin to make achievement gains is often impossible because there are children with greater needs awaiting services.

These problems are particularly severe in districts with the highest concentrations of poor children. Although these districts receive larger Title I grants than do more affluent districts, they generally receive less money for each poor child because they are in States with low average expenditures and lower allocations. These districts can serve only a very limited proportion of their low-achieving students.

Finally, less than 1% of all high school students receive Title I services, although the program was designed for both elementary and secondary students. Relatively few private school students receive Title I services, and those students receive considerably less time in instruction than do public school students.

EFFECTS ON STUDENT ACHIEVEMENT

In the past there has been little evidence that compensatory education programs have had any effect on student development. However, NIE's findings demonstrate that compensatory

instruction can have a considerable effect on learning.

NIE examined the relative effectiveness of different instructional techniques in order to identify promising approaches and to estimate the potential of compensatory education if funds were used well. The NIE Instructional Dimensions Study (IDS) focused especially on individualized techniques, the amount of time students spent in instruction, and whether instruction occurred in the student's regular classroom or in a "pullout" setting. So that the results of different approaches could be compared, the programs selected for study varied considerably in these respects.

The preliminary results of the study showed no dramatic differences among various instructional methods, although they indicated that 1st graders did better when taught in their own classrooms and confirmed the importance of time spent in instruction and on specific learning tasks. Overall, the results showed that the children made significant achievement gains. For example, 1st graders in the sample made average gains of 12 months in reading and 11 months in mathematics during the 7-month period between fall and spring testing, a gain equivalent to a 12- and 15-point rise in their percentile scores. Third graders gained 8 months in reading and 12 in mathematics, a percentile gain of 7 and 15 points. These gains are considerably greater than those found in previous evaluations, which have tended to find at best a month-per-month gain. IDS results suggest that compensatory instruction can meet with significant success.

However, NIE cannot conclude that all compensatory education students are gaining as much as those who participated in the Instructional Dimensions Study. The classrooms in that study were not a random sample, but were selected for their instructional characteristics. Although the programs were operating in a cross-section of school districts, they were probably better implemented and more stable than average Title I programs.

In general, NIE's findings do not show that Title I instruction is effective everywhere or that past problems with the quality and stability of instructional services have been solved. But the results do indicate that school districts can create the conditions necessary to make compensatory instructional services effective.

ADMINISTRATION OF TITLE I

To understand how Title I is managed by Federal, state, and local administrators, NIE investigated both the administrative and legal framework of the program. Management of Title I is complex because it involves three layers of government: Federal, state, and local. While the Federal Government exercises leadership in carrying out a program legislated by the Congress, the principal responsibilities for ensuring that Congressional intentions are met reside with the States and the districts. NIE researchers looked at how this process was affected by the legal framework of Title I and by different management practices.

Federal Requirements

Much of the legal framework is concerned with requirements governing the use of Federal funds at the local level. Program development requirements are designed to ensure that districts provide high-quality services to participating students.

NIE sought to determine whether the legal framework governing the use of Title I funds was consistent, necessary, and clear. In general, it concluded that:

1. The legal framework is consistent. The framework includes the statute passed by the Congress, the regulations prepared by the U.S. Office of Education (OE), and letters of advice sent by OE to States and school districts. In general, neither the regulations nor the letters of advice conflict with the statute or with each other.

2. The funds allocation requirements appear necessary if the Congressional goal of providing special services to educationally disadvantaged children is to be met. These requirements are designed to restrict the ways in which school districts may use funds to ensure that the funds are allocated to schools in the poorest areas and used to supplement, not replace, local expenditures. The regulations assist districts in resisting pressure to use Title I funds for general education or for tax relief.

3. The program development requirements are not necessary in the same sense, because districts have no incentives to deliver poor services. However,

program development requirements do provide a model for district planning. They are also flexible enough to enable school districts to develop widely different programs to meet the needs of educationally disadvantaged children in their community.

4. The legal framework is not, however, as clear as it could be. State and local officials look to the legal framework for guidance in resolving technical and administrative difficulties. Since the language of the framework is not always clear, some confusion exists about the exact interpretation of specific requirements. This lack of clarity has serious consequences, because Title I coordinators who misunderstand the legal framework are likely either to violate its requirements or to adopt unduly restrictive policies. For example, some States and districts have planned their programs more conservatively than the law or the regulations require in order to avoid being charged with violations during program audits. In some areas the provision of special services in the regular classroom is forbidden and students are pulled out of class for their compensatory instruction, but Title I does not require or encourage either "pullout" or "in-class" programs.

5. In general, Federal management appears to be fundamentally sound, and the efforts of the Department of Health, Education, and Welfare (HEW) to see that regulations are observed are appropriate. These efforts consist of program review visits each year by OE officials to a few districts and fiscal audits by HEW auditors in a few others. The results of these site visits and audits can provide guidance even to districts that are not visited. This system does not require a massive Federal enforcement effort, nor does it place heavy burdens on the States or the districts. Some technical problems do remain; for the most part, these involve the procedures required to decide whether services are unambiguously "supplementary."

6. Title I administration is probably better now than it has been at any time since the program was enacted in 1965. Congressional action in 1970 and subsequent redrafting of regulations have made the legal framework far more specific with regard to the use of funds. This has obviously benefited those children the program is intended to serve. For example, early evaluations pointed out that children in target populations were not consistently given special, or additional, services. Today, most local officials know they cannot use Title I money as general aid.

Role of the States

States must attend to many management details if they are to ensure that Title I works as the Congress intended. First, the state Department of Education must approve the applications for Title I assistance sent by local districts. This process requires that state education administrators carefully review each district's application and ensure that it complies with the legal framework as established by the Federal Government and interpreted and augmented by the State. After applications are approved, the State distributes Title I funds to the school districts. During the school year, the State provides the districts with technical assistance in designing a program, monitors the districts' activities, and enforces compliance. Because state Title I personnel have the authority to take action if guidelines are being violated, the States play a key role in making Title I programs work in local school districts.

In studying how States administer Title I, NIE learned that state practices vary greatly. The States differ not only in the ways they communicate information to the districts, but also in the ways they provide technical assistance and monitor and enforce compliance. The NIE study found two major reasons for these differences.

First, many States are unclear about their exact responsibilities and authority in several areas, particularly those related to auditing and

penalizing districts by withholding money. This reflects the fact that the legal framework of the program is often unclear and underlines the need for improvement in this area. Second, state resources available to administer Title I vary, as do decisions about the best use of those resources. For example, while some States use most of their administrative money for staff, others use substantial amounts to pay for consultants or to cover indirect costs such as bookkeeping and computer time. NIE research suggests that States using a smaller portion of their Title I administrative money for staff were generally less active and less effective in dealing with some of the difficulties encountered by local school districts.

STATE COMPENSATORY EDUCATION PROGRAMS

The final issue NIE examined was the relationship of Title I compensatory education programs to those designed and funded by the States. Almost a third of the States have such programs; they provide a significant level of additional funding for compensatory education services.

In general, state programs follow the pattern of Title I, although some alternative funding patterns have been developed. These programs target funds to the same types of pupils and provide the same types of services as does Title I. Additionally, when States try to guarantee that funds are used for supplementary services rather than for general aid or tax relief, they rely on a system of monitoring and sanctions similar to Title I. To implement their system, most States also depend on staff funded from the Title I administrative set-aside.

State programs do not offer a better way of guaranteeing the supplementary services mandated by Title I. While some of the technical features might be desirable in the Federal program, the state programs do not suggest models for fundamental changes in Title I.

Because the Education Amendments of 1974 (Public Law 93-380) permitted the waiver of comparability requirements for state compensatory education programs, most States do not perceive serious tensions between state and Federal requirements. Instead, some state coordinators find Title I useful as a model and as a source of help in protecting state compensatory funds from use as general aid.

In general, state programs provide services that complement and augment Title I programs. Their continued growth is not assured, since compensatory education programs must compete with other claims for state and local funds. States that have established their own compensatory education programs generally can call on greater financial resources than those that have not. Without Federal legislative action to provide incentives, it is unlikely that many more States will initiate major compensatory education programs.

SUMMARY

NIE research suggests that Title I has succeeded in meeting its several goals. First, with regard to funds allocation, the allocation system appears to work as was intended to the county and even to the school district level. In addition, Title I funds are more redistributive with respect to income than any other Federal program of education aid to jurisdictions or than state aid overall.

Second, it appears that Title I funds are used to provide real additions to the educational services provided to participating children. Title I programs provide services that are special in four ways: class sizes are small; compensatory education students receive additional time in instruction; compensatory education teachers are often highly qualified; and many school districts attempt to individualize their instruction.

Third, students have been found to make large achievement gains in Title I programs. In well-planned, stable programs specially selected for their instructional characteristics and setting features, impressive gains were found in reading and mathematics.

Finally, analyses of the legal framework and administration of the program showed that although there are some shortcomings, the Federal Government's approach to the management of the program is fundamentally sound. Moreover, state and local educators told NIE researchers that Title I has helped reverse a historical pattern of American education and has encouraged states and local districts to commit their own resources to previously neglected poor and disadvantaged students. The program has helped States to redefine their priorities and elevated the importance accorded to achieving equal educational opportunity for every child.

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CHAPTER V. ARCHIVE PROJECT 55

CHAPTER I. RESEARCH ON FUNDS ALLOCATION

CENSUS TABULATION OF POVERTY STATISTICS[1]

Purpose

The tabulations developed for this project were designed by the National Institute of Education (NIE) to provide estimates from the 1970 census of the poverty population, using 12 alternative definitions. The data were prepared for all counties and available school districts in the United States. In addition, other selected characteristics were presented for the total population of each area.

Method

The tabulation set was prepared from the 20% sample basic records from the 1970 Census of Population and Housing. The Spanish-heritage data were based on a 15% sample.

For each geographic area and for each of four race/ethnic categories--total, white, black, and Spanish--estimates of poverty populations were first developed using the SSA (Orshansky) index, which provides a range of income cutoffs adjusted by such factors as family size, age and sex of family head, number of children under 18 years old, and farm or nonfarm residence. This index was then modified by multiplying each of the cutoffs by 75%, 125%, 150%, 175%, and 200%, respectively, and estimates again were developed. Six additional estimates were prepared, each using a different series of cutoffs adjusted only for family size and type. One index was based on 50% of the U.S. median income; another used weighted average threshold values. The remaining four estimates used a series of SSA thresholds identified as (1) the Economy Plan, (2) the Thrifty Plan, (3) the Low Cost Plan, and (4) the Condensed Family Size.

These estimates were prepared for each county in the U.S. and for each school district identified in the National Center for Education Statistics (NCES) "Fifth Count" tabulations. This school district universe consisted of those districts with over 300 enrollment and an estimated 1970 census population of 1,000 persons or more. The census area/school district identification used a reference file developed in conjunction with NCES, Canyon Research Inc., and the Census Bureau.

Findings

These tabulations were analyzed in-house, and contributed to Chapters II, III, and VI of the report listed below.

Report

National Institute of Education. Title I Funds Allocation: The Current Formula. Washington, D.C.: National Institute of Education, U.S. Department of Health, Education, and Welfare. September 30, 1977.

Contractor: U.S. Department of Commerce
Bureau of the Census
Washington, D.C. 20233

ALTERNATE GRANT STRUCTURES FOR TITLE I ASSISTANCE

Purpose

The purpose of this project was to develop a computer simulation model of the aggregate and distributional effects of alternative grant structures for Elementary and Secondary Education Act of 1965 (ESEA) Title I assistance.

Method

A variety of data sets were collected and used as the raw material for econometric estimation of the impact of block and matching grants

[1] Data from this study are being placed in an archive. A description of the archive project may be found on p. 55.

on local government spending. Estimates of aggregate spending and spending for individual educational inputs were prepared.

At the same time, a computer simulation model capable of translating alternative grant systems into expenditures and aid was developed. This used the ELSEGIS data on school district income and expenditure merged with census demographic and income data. Results of the econometric estimation were then incorporated into the model.

Findings

The econometric analysis found substantial sensitivity of local educational spending to Title I aid. Because of the differential nature of this type of block grant, the Title I aid is more powerful in stimulating local spending than would be expected of the traditional block grant. The estimates indicated that between 50 cents and 1 dollar of each Title I aid dollar is added to local educational spending.

The matching aid used in several state programs is also an effective stimulus, with an estimated price elasticity of nearly one. This implies that a dollar of matching aid adds nearly a dollar to local spending.

Other findings included evidence on the stimulative effects of aid on particular expenditure categories and the influence of other variables on spending patterns.

Because of the interest in distributing aid on the basis of low achievement as an alternative to low income, part of this study focused on developing the "predicted achievement" method. With this method, aid is distributed according to statistically predicted achievement rather than actual achievement. This avoids the problem of distorted incentives for low test results.

These empirical studies were combined into the simulation model. The report on that research (item 3 in the next section) shows results of these simulations on aggregate spending and on spending by income and achievement status.

Reports

Feldstein, Martin. "Distributing Federal Education Aid to Low Achievement Pupils: The Predicted Achievement Method." In M. Guttentag (ed.), Evaluative Studies Review Annual, Vol. 2, 1977.

Feldstein, Martin. The Effect of a Differential Add-on Grant: Title I and Local Educational Spending. Journal of Human Resources. Forthcoming.

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Feldstein, Martin, and Daniel Frisch. Local Government Budgeting: The Econometric Comparison of Political and Bureaucratic Models. Undated.

Wise, David. Prediction of Test Scores: California. December 1976.

Wise, David. Wealth, Block Grants and School District Expenditure in California. April 1977.

Contractor: Martin Feldstein
1731 Cambridge Street, Room 403
Cambridge, Massachusetts 02138

ANALYSIS OF TITLE I ALLOCATION AND SELECTED ALTERNATIVES

Purpose

Prior to this research, available data on Title I allocations consisted of the total amount received by each State and county. This project performed analyses to:

1. Describe the amounts received by places classified in a number of ways
2. Analyze the impact of the elements of the Title I formula on the allocative patterns generated by the formula
3. Contrast the current formula with a number of alternatives

Method

The project involved the application of two software packages to a specially constructed data base. The data base included, for all counties and for over 11,000 school districts: counts of children 5-17 years old, from the 1970 census, whose families were poor in 1969 by the official poverty definition; analogous counts for a number of alternative poverty definitions; other tabulations from the 1970 census; and Title I program and funding data.

These data were analyzed in-house using the

Federal Education Finance (FEF) model, developed for the Congressional Research Service (CRS) and expanded for NIE by TEAM Associates. The model permits the simulation of a wide range of formulas for Title I and creates files that can be analyzed by using the Statistical Package for the Social Sciences (SPSS).

Among the simulations performed were:

1. Simulations of the current formula, substituting alternative poverty definitions for the current Orshansky definition, which applies a particular poverty standard to families in each of 124 different categories

2. Simulations of the current formula, with particular elements either omitted or weighted differently

The current Title I allocation, and these simulated allocations, were studied in terms of the funds distributed:

1. To census regions and divisions

2. To metropolitan and nonmetropolitan areas

3. To large cities, other cities, and rural areas

4. To counties and districts classified by rates of poverty

5. To counties classified by rates of Title I eligibility and by the percentage of children who are black or Hispanic

Findings

The Current Formula

1. The Title I formula clearly accomplishes the purposes intended by the framers of the statute. As the number of formula-eligible children in a county increases, the average Title I allocation to the county rises consistently.

2. The largest proportion of Title I money is directed to the two kinds of places with the most formula-eligible children: large central cities and rural sections outside metropolitan areas.

3. Southern States, which contain the largest proportions of children counted as eligible under the formula, receive the largest proportion of Title I funds, followed by the Northeast, North-Central, and Western regions.

4. Due to their very high concentrations of low-income children, Southern counties receive more money for each school-aged child than do counties in other regions. The correlation between the Title I allocation per school-aged child and the percentage of formula-eligible children is extremely high--0.93.

5. The average amount for each formula-eligible child at the county level reflects the average expenditures of the States in which the counties are located. Urban and Northeastern counties receive the most money for each formula-eligible child; rural and Southern counties receive the least.

6. The allocation per formula child is relatively low for counties that contain high proportions of eligible children. This is because the Southern States, which have the lowest educational expenditures, also contain most of the districts that have heavy concentrations of low-income children.

7. The principal effect of formula elements other than poverty counts is to direct funding to the populous States of the North and West, especially to the large cities in these States.

Formula Alternatives

1. Raising the poverty standard would reduce the share of the allocation going to Southern States and to large cities elsewhere in the country.

2. Cost-of-living adjustments in the poverty standard are not generally considered feasible at the present time. If made, they would reduce the share of funding going to the South.

3. Updating poverty counts using the Survey of Income and Education (1976) would also reduce the share of funding going to the South and to nonmetropolitan areas in general.

Report

National Institute of Education. Title I Funds Allocation: The Current Formula. Washington, D.C.: The National Institute of Education, U.S. Department of Health, Education, and Welfare. September 30, 1977.

RESEARCH ON THE EFFECTS OF DEMONSTRATION COMPENSATORY EDUCATION PROJECTS[2]

Purpose

The Demonstration Compensatory Education Study is a 3-year project on the effects of changes in the procedures by which ESEA Title I funds are allocated at the intradistrict level. Thirteen local educational agencies (LEAs) are currently participating in the demonstration.[3] During 1975-76, the planning year, these districts conducted their Title I programs under current Title I guidelines; i.e., eligibility of schools for Title I services was determined on the basis of poverty criteria, while eligibility of students was determined on the basis of educational need. For 1976-77 and 1977-78, the implementation years, certain aspects of the Federal guidelines were waived, thus permitting the LEAs to use educational need rather than economic need as the basis for distributing Title I services to schools. The waivers also allowed the districts to depart from existing formulas governing the "targeting of funds, especially rules about the degree of concentration of Title I eligible students required to make a school eligible for grants under Title I."[4]

The research portion of the demonstration study is being conducted by Abt Associates, Inc. The primary research questions being addressed are:

1. What changes in Title I allocation policy are made by each of the demonstration districts under the waiver of Federal regulations?

2. What effects do changes in Title I allocation policy have on the characteristics of students served by Title I within the demonstration districts?

3. What effects do changes in Title I allocation policy have on the instructional and support services experienced by students of different types within the demonstration districts?

4. What effects do changes in Title I allocation policy have on the organization and administration of compensatory programs and the instructional services delivered within the demonstration districts?

5. What is the reaction of parents to changes in Title I allocation policy within the demonstration districts?

6. What are the costs associated with changes in Title I allocation policy?

In addition to these primary research questions, several other questions have also been considered. These include the demographic and bureaucratic characteristics of the demonstration districts, as well as the events surrounding the application for participation and the development of the districts' demonstration plans.

Method

Both qualitative and quantitative methods have been employed to address the basic research

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[2]Data from this study are being placed in an archive. A description of the archive project may be found on p. 55.

[3]The 13 school district are: Adams County #12, Colorado; Alum Rock, California; Berkeley County, West Virginia; Boston, Massachusetts; Charlotte, North Carolina; Harrison County, West Virginia; Houston, Texas; Mesa, Arizona; Newport, Rhode Island; Racine, Wisconsin; Santa Fe, New Mexico; Winston-Salem, North Carolina; and Yonkers, New York.

[4]Research Plan, Compensatory Education Study. Washington, D.C.: The National Institute of Education, Department of Health, Education, and Welfare. December 16, 1974, p. 37.

questions. Qualitative data are obtained primarily through semistructured on-site interviews with key administrators, program directors, and parents. Quantitative procedures are described more fully below.

Sample. The sample was designed to include three types of schools based on the presence or absence of Title I programs in the baseline (1975-76) and implementation (1976-77 and 1977-78) years. Once schools were randomly selected by school type, all 3d- and 4th-grade classrooms within these schools were included in the sample. Two students (one Title I and one non-Title I, if possible) were randomly selected from these classrooms.

Because the research called for information on the regular and, if appropriate, Title I instruction in reading and mathematics delivered to these students, approximately 2,200 teachers and 900 instructional specialists who provided this instruction were included in the sample. Because the research called for information on the organization of the districts' schools, the services they provide, and the students they serve, all principals (approximately 600) in the districts were asked to participate in the study. Finally, since the research required information about parent involvement in and reaction to the demonstration, selected parents and Title I Parent Advisory Council (PAC) members (approximately 1,800) were also asked to participate.[5]

Instrumentation. The primary means of collecting information were self-administered questionnaires and face-to-face interviews.

Analytic Procedures. The major question addressed by the quantitative analyses was whether or not characteristics of or services received by Title I students changed over the first 2 years of the study (and, by extension, over the third year as well). The general approach taken was to perform analysis of variance-type methods within each district, comparing the mean characteristics or experiences of Title I students prior to implementation and during the first (or second) implementation year. The strongest evidence of a change resulting from the demonstration was considered to be an observed change for Title I students over the 2 years, accompanied by little or no change in services for non-Title I students. More generally, however, any evidence of differential change was considered to be indicative of a demonstration-related effect.

Findings

Allocation Policy Changes. All but one of the districts conducting demonstration projects elected to shift from the standard poverty-based method of selecting Title I schools. In addition, all 13 districts chose to expand the number of schools and/or students receiving Title I services. The 12 districts that elected to change their school selection procedures did so in a variety of ways:

1. Six districts chose to target low-achieving students directly regardless of the schools they attended and, thus, to serve all elementary schools. These are referred to as "direct allocation" districts.

2. Two districts chose to rank schools based on the proportion of students with low reading test scores and to target schools below a certain cutoff level. These are referred to as "achievement allocation" districts.

3. Two districts retained the standard practice of selecting schools based on the proportion of students from poor families, while adding schools based on the proportion of students who were low achieving.

4. Finally, two districts selected all or almost all students in some schools and only those with low test scores in others.

All districts except one elected to increase the number of elementary schools served in 1976-77. This was particularly true of the direct allocation districts (i.e., those serving low-achieving students in all elementary schools), where the proportional increase in schools served ranged from 20% to 433%. In the two districts substituting achievement for poverty criteria, the proportional increases were 16% and 85%, respectively. In all except one of the remaining districts, the proportional changes were relatively small, ranging from 0% to 14%.

All but two districts increased the number of elementary students actually served by Title I. Once again, the most dramatic increases occurred in the direct allocation districts, where the proportional increases ranged from 29% to 250%.

Student Characteristics. Because most of the districts chose to extend their Title I services to more students, the absolute numbers of low-achieving, poor, and minority students increased during the first year of implementation. Thus,

[5] These numbers are based on response rates for the 1975-76 school year.

coverage of these disadvantaged groups did increase. On the other hand, there were also increases in the absolute numbers of nondisadvantaged students served as well. Thus, the selectivity of the Title I population, i.e., the proportion of Title I students who were disadvantaged, did not necessarily increase. Changes in selectivity were not uniform for different types of disadvantage or for different districts.

Averaging across all districts, there was a slight increase in the proportion of Title I students who were low achieving, where low achieving was defined as reading 1 or more years below grade level. In 1975-76, the average was 65%; in 1976-77, it was 69%. On the other hand, there was a fairly consistent decrease in the proportion of poor students served by Title I. In fact, when poverty was defined as participating in a free or reduced-price lunch program, decreases were found in 9 of the 13 districts. The third student characteristic examined was race. Analyses of race data were concerned with changes in the minority group membership of Title I students, defined as all other races besides white. No statistically important increases or decreases were found in these racial characteristics.

In summary, these findings indicate that the allocation policy options adopted by these districts resulted in small changes in the characteristics of the students served. Although variation across districts did exist, generally the proportion of poor students decreased slightly and the proportion of minority students remained unchanged.

Student Experiences. Changes in the services received by Title I students were generally similar across the 13 demonstration districts and can be summarized as follows:

1. There was generally a small decrease in the amount of time during which Title I students received compensatory language arts instruction.

2. There was generally a larger increase in the amount of time during which Title I students received regular language arts instruction.

3. Overall, therefore, Title I students gained a small amount of time in total language arts instruction (compensatory plus regular).

4. The character of Title I language arts instruction—the size of the instructional group and the type of instructor—did not change substantially as a result of the demonstration.

5. The time lost in compensatory language arts instruction (14%) was relatively small compared with the number of additional students served (71%).

Costs. Since participation in the demonstration study did not affect the size of the Title I grants received by the 13 districts, it was assumed that allocation changes would be made within the constraints of previous expenditure levels. Districts did increase their Title I expenditures at the elementary level, however, to accommodate program expansion.

Findings based on a preliminary analysis of resources used to support expansion may be summarized as follows:

1. On the average, the 12 districts for which data are available increased the total amount of elementary instructional services delivered by 72% during the first implementation year (1976-77).

2. Approximately half of this increase in services was supported by an increase in Title I expenditures for elementary instruction, which averaged 36% across the districts.

3. Of the eight districts which increased Title I expenditures for elementary instruction, three did so primarily by depleting the amount of funds carried over into the succeeding year. Two did so primarily by redistributing resources within the Title I program. Finally, three utilized a combination of methods, including use of increased Title I allocations, use of carryover funds, and/or redistribution of resources.

4. In all, carryover funds were used to increase Title I expenditures for elementary instruction in six districts. In four of these, the rate of carryover depletion in 1976-77 was high, making long-

term continuation of the expanded level of elementary instructional services problematic.

5. Finally, two other factors contributed to the increase in elementary instructional services: (1) change in program characteristics and (2) use of non-Title I resources. Increased staff utilization was the most frequently adopted programmatic change, accounting for an increase in services in four districts. Use of non-Title I staff was a contributing factor in three districts.

Reports

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Sjogren, Jane H., and Richard Ames. ESEA Title I Allocation Policy: Demonstration Study--Cost Study. Cambridge, Mass.: Abt Associates, Inc. Forthcoming.

Sjogren, Jane H., et al. Working Paper: Analysis of Resources Used to Increase Title I Elementary Instructional Services Under the Title I Funds Allocation Demonstration. Cambridge, Mass.: Abt Associates, Inc. February 1978.

Vanecko, James J., Francis Archambault, and Nancy Ames. Executive Summary of the Analysis Plan for Research on the Effects of Demonstration Title I Compensatory Education Projects. Cambridge, Mass.: Abt Associates, Inc. July 1976.

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Vanecko, James J., et al. ESEA Title I Allocation Policy: Demonstration Study--Results of First Year Implementation. Vols. I and II. Cambridge, Mass.: Abt Associates, Inc. March 1978.

Vanecko, James J., et al. ESEA Title I Allocation Policy--Implementation Decisions, Research Plans. Cambridge, Mass.: Abt Associates, Inc. December 1977.

Vanecko, James J., et al. Research on Demonstration Title I Compensatory Education Projects--Analysis Plan. Vols. I and II. Cambridge, Mass.: Abt Associates, Inc. April 1976.

Contractor: Abt Associates, Inc.
55 Wheeler Street
Cambridge, Massachusetts 02138

MODIFICATION OF FEDERAL EDUCATION FINANCE MODEL AND CONSTRUCTION OF DATA BASE[6]

Purpose

One important component of the Compensatory Educational Study was an assessment of the distributional impact of alternative Title I allocation formulas. This project developed the simulation model and data for the Federal Education Finance (FEF) Model Version 2.0 used by the Compensatory Education staff to perform this distributional analysis.

Method

This project had three phases.

Phase I developed specifications for the simulation model and data system. This simulation model is a revised version of the FEF model designed and built in late 1973 to specifications of the Congressional Research Service (CRS) of the

[6]Data from this study are being placed in an archive. A description of the archive project may be found on p. 55.

Library of Congress. That computer model permitted the CRS Education and Public Welfare staff to define the Federal aid to education bills in a format acceptable to the model. The model could then calculate the entitlements and allocations for each county or district and report those entitlements and allocations and additional descriptive statistics.[7]

The revised model developed for the Compensatory Education Study had two major additional features: the model simulates multipart formulas, such as the one now used to allocate Title I funds, and the model interfaces decidedly with the Statistical Package for the Social Sciences (SPSS). This allows the analyst access to SPSS data file handling facilities and to use SPSS for statistical analysis of model output files.

The model data bases included three SPSS archives files: state, county, and school district archives. The archives contain data required for simulation of alternative Title I formulas including: counts of children below selected levels of poverty (derived from 1970 census data); counts of children in families receiving Aid to Families with Dependent Children (AFDC) payments above the poverty level (state and county level only); state average per-pupil expenditures; and fiscal year 1976 Title I allocations.

Phase II developed the simulative software and documentation, including computer programs and job control language which allows the analyst to interface the FEF model with SPSS.

Phase III developed the state, county, and school district archive files.

Findings

This research resulted in software for in-house NIE research.

Reports/Other Products

The FEF Model Version 2.0 and the FEF Model/SPSS Interface System, a series of computer programs.

Smith, Stephen M. Federal Education Finance Model, Version 2.0. Vol. III: SPSS Interface Users' Guide and Technical Documentation. Washington, D.C.: TEAM Associates, Inc. September 1976.

Zweig, Bruce. Federal Education Finance Model Version 2.0. Vol. I: Users' Guide. Washington, D.C.: TEAM Associates, Inc. August 1976.

Zweig, Bruce. Federal Education Finance Model Version 2.0. Vol. II: Technical Documentation. Washington, D.C.: TEAM Associates, Inc. August 1976.

Contractor: TEAM Associates, Inc.
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RELATIONSHIP BETWEEN POVERTY AND ACHIEVEMENT

Purpose

One of the reasons advanced for the use of poverty statistics in distributing Title I funds is that poverty and achievement are very closely related. Some of those who hold this position argue that the use of poverty statistics is therefore a good way of targeting money to low achievers. Others believe that poor low achievers should have priority in receiving Title I because poverty has contributed to their low achievement. Evidence on the relationship between poverty and achievement was therefore examined carefully.

In addition to an in-house review of existing material, studies were conducted to examine further:

1. Which aspects of home environment are consistently associated with higher or lower achievement by students

2. Whether changes in family income or in other aspects of the home are also associated with changes in students' achievement

3. How family income compares with other factors as a way of predicting students' academic success over their school life and thus of identifying those who will have severe academic problems by the time they complete compulsory schooling

[7] Because the original FEF model provided many of the analysis capabilities required by the NIE study, CRS and NIE agreed to share data and analysis capabilities. CRS provided NIE with a copy of the original FEF model and data base. In turn, NIE provides CRS with a copy of the revised model and data base developed by this project.

Method

Data bases were sought out which contained longitudinal information. On the basis of this search, three projects were undertaken.

First, analyses were conducted of a mammoth longitudinal data base covering all children born in 1 week of 1958 in Great Britain. The National Child Development Study has followed the children over a period of almost 20 years and can provide unique information on relationships between achievement and home environment. Previous cross-cultural studies had indicated that the relationship between poverty and achievement is extremely similar in Great Britain and the United States. The data were therefore used to examine: first, how strongly aspects of home environment were associated with having acute academic problems in high school; second, how far home background could be used to identify, in elementary school, children at risk of such failure and likely to need special help; and third, whether increases or decreases in family resources affected children's achievement, and thus whether poverty could be shown to have a direct causal effect on attainment.

Second, analyses were conducted of data on children from poor black families in Gary, Indiana, who had been studied as part of the Income Maintenance Experiment. More limited longitudinal data were available for this sample. However, they made possible analyses of how far modifiable and income-related aspects of the home affected students' relative attainment, even within a generally poor population.

Third, a smaller longitudinal data base covering children in California schools was also examined. These data provided information on income and achievement, and also on teachers' ratings of work habits and behavior.

Findings

The National Child Development Study results confirmed the existence of a strong relationship between poverty and achievement. Thirty-eight percent of those from families with fathers in the lowest status occupations were experiencing severe academic problems in high school, compared with 15% of the age group as a whole. Similar figures were found for those receiving free school meals or other welfare benefits. Father's occupation, parents' education, and quality of housing were found to be consistently related to achievement at all ages, confirming the results of existing studies which examined only limited groups of children at one point in time.

Changes in home background also have direct, though limited, effects on achievement. Children whose family circumstances improved showed somewhat higher attainment and vice versa. However, it should be noted that the changes documented were not simply in money income, but in parents' occupations or in living conditions.

Although the link between poverty and achievement was strong, a majority of low achievers were not on welfare or from the lowest occupational group, just as a majority of children from such backgrounds were not low achieving. As a result, home background was found to be a very ineffective way of identifying early-on the children who would later have academic problems. Early achievement scores are far better predictors. Thus, children whose scores were in the lowest 15% for the population at age 7 include about 75% of those who will be extremely low achieving in high school (scores of 7-year-old children would be less effective predictors). Children from the lowest occupational class comprise a far lower percentage of those at risk than this 75% figure, and those who are poor and on welfare an even smaller number.

The Gary, Indiana, longitudinal data included very few children who experienced substantial changes in their home environment, and it was therefore not surprising that the analyses did not show any clear links between changes in the home and changes in attainment. They did, however, confirm that, even within a sample of poor children, those from the most disadvantaged homes are more likely, from year to year, to be low achieving. Specifically, frequent changes of residence, overcrowding in the home, and lower food expenditures (which presumably means poor nutrition) [illegible] the lowest achieving pupils as compared with their peers in families of similar income and occupational status. Once again, the lowest achieving were most accurately identified from year to year by their previous achievement levels. These, of course, embody the effects of home environment.

Finally, the California data showed a relatively small overlap between poverty and achievement. Both high school achievement and the type of classroom adjustment and behavior, factors closely associated with continuing in education and with academic success after high school, were more closely associated with earlier academic performance and behavior. Poverty was not a good way to identify those likely to have severe problems in high school.

Reports

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Prosser, Hilary, Dougal Hutchinson, and Peter Wedge. Education Failure. London: National Children's Bureau. 1977.

Wolf, Alison. The Relationship Between Poverty and Achievement. Washington, D.C.: National Institute of Education. December 1977.

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School of Education
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Princeton, New Jersey

National Children's Bureau
8 Wakley Street
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London, England

RELATIONSHIPS BETWEEN TITLE I AND OTHER EDUCATIONAL EXPENDITURES

Purpose

The set of data tabulations provided by this project enabled NIE to examine the overall pattern of Federal aid to education and determine whether the distribution of Title I funds affects this pattern.

Method

The following data files were assembled for use:

1. NCES Universe of School Districts, 1975-76
2. NCES Cross Reference Geography File
3. School District Master File
4. Teacher Data, EEOC 1974
5. Title I Allocations, 1974-75
6. Combined ELSEGIS and Fourth Count File, 1969-70
7. ELSEGIS Finance File, 1974-75, 1975-76
8. SAFA Statistical File, 1974-75, 1975-76

Software was developed to produce the necessary tabulations from the file, the variables were transformed into new ones for suitable statistical applications, and a weighting criterion was established which redistributed the sample districts into 100% estimates for districts within each State. Because of the number and size of the data files, an extract file was created. Then tabular specifications were developed, shells designed, and tables produced. Additionally, multivariate analysis was performed where appropriate.

Findings

See Chapter VIII in the report listed below.

Report

National Institute of Education. Title I Funds Allocation: The Current Formula. Washington, D.C.: The National Institute of Education, U.S. Department of Health, Education, and Welfare. September 30, 1977.

Contractor: Applied Management Sciences
62 Wayne Avenue
Silver Spring, Maryland 20910

STUDY OF STUDENT ACHIEVEMENT MEASURES AS TITLE I ELIGIBILITY CRITERIA[8]

Purpose

Congress, in the 1974 Education Amendments, directed NIE to conduct a comprehensive study in order to facilitate the reauthorization of Title I. Two of the topics addressed by the study were subsequently investigated by the ML-Group for Policy Studies in Education, CEMREL, Inc. The research was to clarify:

[8]Data from this study are going placed in an archive. A description of the archive project may be found on p. 55.

1. The likely consequences of change from poverty to pupil achievement as a Title I eligibility criterion

2. The feasibility and costs of using achievement as the criterion

Method

The study of the cost and feasibility of alternative models for obtaining achievement test data that could serve as a basis for determining Title I eligibles in States and in school districts focused on (1) a national testing program for achievement-based Title I funds allocation to States and (2) the issues that arise in giving States options to use state testing and assessment programs for allocating these funds to school districts. However, CEMREL also examined a national testing program that would determine Title I eligibles directly for each of the 16,000 school districts currently operating in the United States. No county-level procedures were considered. The research involved classifications of several conceptual and technical issues, the most crucial of which are:

1. Delimitation of the target population for Title I

2. Delimitation of the population to be tested

3. Standard setting and objective specification in the determination of a cutoff point for low achievement

Findings

On the basis of the information and reasoning exposited, CEMREL concluded that is is feasible to implement a National Assessment for Educational Progress (NAEP)-type achievement-based Title I eligibility estimation procedure and that NAEP would be the most experienced agent to accomplish this task. The problems involved seem solvable within short time spans with no severe technical problems.

A vital part of a decision on such a project is cost. Total assessment cost on the basis of one subject area (reading) and one age group was estimated at roughly $7.2 million. This estimate excludes cost increases that result from a necessarily more extensive ELSEGIS data collection and disregards costs associated with auditing necessary to ensure reliability of collected achievement data.

In terms of the total number of children currently counted as being in poverty, the yearly achievement testing costs for state-level eligibility estimation would amount to about 50 cents per child, assuming a 2-year testing cycle, or 33 cents per child for a 3-year cycle. These testing costs represent 0.1[illegible]% and 0.11% of total current expenditures for Title I, respectively. However, costs increase considerably if multiple subject areas and age or grade groups are tested. And costs increase tremendously ($40 million to $50 million) if the testing is to result in reasonably accurate eligibility estimates for school districts.

This project also investigated the likely consequences of using an achievement basis for the allocation of Title I funds by analyzing nationally collected test data for the States and state test data for districts in selected States. Additionally, achievement eligibility was compared with poverty rates, using 1970 and 1975 poverty data.

The estimates of likely changes from poverty- to achievement-based Title I funds allocation are not numerically precise. However, the study reveals general trends. It appears that Southern and Western States gain funds under an achievement criterion. However, the numerical values of individual state estimates depend too much on the achievement cutoff point chosen to be strongly considered in any decisionmaking process.

It was also found that large central cities gain under a change from poverty-to achievement-based Title I funding, while predominantly white rural districts tend to lose funds. No general trend could be revealed for alternative district types in other locations with other racial/ethnic compositions.

Reports

Haertel, Edward H., Annegret Harnischfeger, Raymond E. Pifer, David E. Wiley, and Elinor M. Woods. Achievement Measures as Title I Eligibility Criteria: Concepts, Methods, and Eligibility Estimation. Chicago, Illinois: CEMREL, Inc. September 1977.

Haertel, Edward H., and David E. Wiley. Achievement and Poverty as Title I Eligibility Criteria: Statistical Comparisons and Findings. Chicago, Illinois: CEMREL, Inc. November 1977.

Harnischfeger, Annegret, Larry E. Huckins, and David E. Wiley. The National Assessment of Educational Progress Model: A Tool for Achievement-Based Title I Fund Allocations? Chicago, Illinois: CEMREL, Inc. October 1977.

Harnischfeger, Annegret, David E. Wiley, and Elinor M. Woods. Issues of Title I Fund Allocations Through States to Local School Districts. Chicago, Illinois: CEMREL, Inc. October 1977.

Contractor: ML-Group for Policy Studies in Education
CEMREL, Inc.
875 North Michigan Avenue
Chicago, Illinois 60611

SUBCOUNTY ALLOCATION OF TITLE I FUNDS

Purpose

Although Title I of ESEA provided a formula for determining grants to school districts, the required data were generally unavailable at the school district level. The U.S. Office of Education (OE) was authorized, therefore, to use the formula to calculate allocations at the county level and to delegate to state educational agencies (SEAs) the responsibility for dividing the county allocations to the school districts within and across boundaries. The process, called subcounty allocation, was studied to:

1. Describe the current subcounty allocation procedures used by the States
2. Analyze the kinds of districts affected by different subcounty allocation procedures
3. Analyze alternative procedures for allocating Title I funds for school districts

Method

The project was divided into four phases.

Phase I, describing current subcounty allocation procedures, was accomplished via informal discussions with state educational agency personnel.

Phase II, analyzing the kinds of districts affected by different subcounty allocation procedures, was accomplished through extensive statistical analysis of school district data gathered for this project. For a sample of 24 States, the data elements included the total number of eligible children as defined by each State and the number of formula-eligible children in different formula components (census, AFDC, neglected and delinquent foster, and others). Not all of these data elements were available for all districts. Sufficient data were available, however, to simulate the effects of removing hold-harmless provisions at the district level and of changing the subcounty formulas to a census-only formula or to a formula approximating the statutory formula used for county allocations.

Phases III and IV analyzed alternative allocation strategies. Phase III, determining the feasibility of alternative allocation strategies, employed both interview and computer analysis techniques.

Phase IV was a synthesis of the results of work performed in the first three phases. Four alternative procedures were identified; their impact on district allocation was extracted from the results of Phase II, and their impact on state data gathering was extracted from the results of Phases I and II. Their impact on OE and state administrative procedures was determined from the results of Phase III.

Findings

Current Practices

1. Forty-six States must perform subcounty allocation. (Florida, Maryland, Nevada, and West Virginia do not need to do so because their counties are also LEAs.)
2. Twenty-five States use the statutory formula for subcounty allocation. Eleven other States use a formula combining census and AFDC data in a manner similar to the statutory formula. The remaining States rely entirely either on AFDC data (five States) or on some other combination of data such as state income tax plus AFDC or free lunch plus AFDC.
3. Four States do not adhere to county allocation, choosing instead to allocate the total state Title I funds available directly to school districts.
4. Census data for school districts and county components of school

districts supplied by OE are used in fewer than half of the States that include census data in their formula. The remainder develop their own school district census data.

Impact of Different Allocation Procedures. If the current state subcounty allocation formula were replaced for all States by a formula approximating the statutory formula:

1. In 7 of the 21 States using nonstatutory formulas in fiscal year 1976, more than 10% of each State's Title I funds would shift among districts.

2. The largest dollar shifts would occur in States that emphasize AFDC over census data in their subcounty allocation formulas.

3. In States that currently emphasize AFDC data in their formulas, a majority of central-city and urban districts would lose 5% or more of their allocation. A majority of suburban districts and districts with high Orshansky poverty rates would gain 5% or more.

A greater percentage of districts are held harmless in States that emphasize AFDC rather than census data in their formulas. Less than 2% of any State's Title I funds would shift among districts if hold-harmless provisions were applied.

If all States were allowed to use their current allocation formula for substate allocation:

1. Significant funds would be shifted among districts in States whose allocation formula emphasizes AFDC data over census data. In California and Missouri, 8% and 17%, respectively, of the State's Title I funds would shift.

2. Metropolitan, central-city, and suburban districts would be the beneficiaries in these States.

3. In States employing the statutory formula, no substantial change would take place.

Feasibility of Alternative Allocation Strategies. Four alternative allocation strategies were examined. Three would mandate the use of a single Federal formula; the last would permit States to allocate funds according to their own formula. The three single-formula alternatives are:

1. Single-formula subcounty allocation--similar to current procedures except that all States would use a uniform formula

2. Single-formula substate allocation--OE would calculate state grants, and States would use a uniform formula for allocation directly to school districts

3. Direct allocation--OE would calculate and allocate district grants according to a single formula

The fourth alternative is:

Multiple-formula substate allocation--OE would calculate state grants, and States would select a formula for allocation to school districts

Data availability and reliability are only relevant to the first three alternatives. No additional data are required by the multiple-formula substate strategy. For each of the single-formula alternatives, the problems of data availability and reliability are the same.

1. If a single source of census data is mandated, census data are available for all districts with enrollments over 300 that have not experienced significant boundary changes since fiscal year 1974.

2. If the use of multiple sources of census data is permitted, census data are available for 39 States now using such data for subcounty allocation. In 7 of the 11 remaining States, census data are available for 80% of the school districts. The problems of obtaining and validating census data in these 11 States would be no worse than the problems already resolved by the 39 States currently using census data.

3. Census data reliability is also a function of whether single or multiple sources are employed.

If a single source is mandated, data reliability must be reviewed and validated by States. The OE Special School District Tabulations meet or exceed the standards now used by States to prepare data for subcounty allocation.

4. AFDC data availability does not present any significant difficulties for any of the formula alternatives. Only Indiana and Washington would have to institute new data-gathering procedures.

The administrative complexity to implement the four alternatives would vary.

1. The most complicated procedures in terms of Federal administration would be direct allocation by OE. OE would be required to calculate directly all district allocations, an increase in reporting units from 3,300 to 17,000 yearly. Data collection delays by many school districts would pose a significant problem.

2. Multiple-formula substate allocation would require the fewest changes. No new data collection would be required.

3. Single-formula substate and subcounty allocation would require some additional data collection by States.

Effects of Alternatives. For States currently using a formula similar or equivalent to the statutory formula, the dollar impact of shifting to any of the alternatives would be negligible.

For States emphasizing AFDC over census data in their formulas:

1. As much as 16% of the States' Title I funds would shift among districts in shifting to single-formula subcounty or single-formula substate.

2. Urban districts would generally lose funds in a shift to single-formula options, while suburban districts would gain.

3. Central-city and suburban metropolitan districts would generally gain funds in a shift to the multiple-formula substate alternative.

The single-formula substate allocation alternative provides the maximum amount of consistency in treatment of districts while minimizing administrative effort and delays.

Reports

Ferrara, Lynette, Dianne Seiffert, and Alan Paller. A Feasibility Analysis of Alternative Strategies for Determining School District Title I Allocations. Washington, D.C.: Applied Urbanetics, Inc. 1977.

Gutmann, Babette, and Alan Paller. State Profiles of Subcounty Allocation Procedures. Washington, D.C.: Applied Urbanetics, Inc. 1977.

Paller, Alan. A Summary of Alternative Strategies for Determining School District Title I Allocations. Washington, D.C.: Applied Urbanetics, Inc. 1977.

Paller, Alan, and Babette Gutmann. Current Subcounty Allocation Practices. Washington, D.C.: Applied Urbanetics, Inc. 1977.

Smith, Stephen, Babette Gutmann, and Alan Paller. Impact of Variations in Subcounty Allocation Procedures on Title I ESEA Allocations to School Districts. Washington, D.C.: Applied Urbanetics, Inc. 1977.

Contractor: Applied Urbanetics, Inc.
1701 K Street, N.W.
Washington, D.C. 20006

DEFINING THE POVERTY SYNDROME

Purpose

The purpose behind this project was to answer the question: What is compensatory education compensating for? Or, in more technical terms, what can the empirical literature tell us about the behavioral links between students and poverty? How can these findings be related, conceptually, to the aims of compensatory education programs?

Method

From the outset, this review of the literature was shaped around the notion of a poverty syndrome, a constellation of identifiable characteristics that would differentiate poverty-level children from their middle-class peers. The specific elements of the syndrome would be drawn from research reported during the 1960's and 1970's, the height of poverty research activity.

A preliminary review suggested a rough breakdown into two aspects of the syndrome. One would be the individual and his/her characteristics; the other would be the correlates of the social setting. This distinction between "characteristics" and "correlates" was admittedly arbitrary, but proved to be useful in organizing the empirical material.

Findings

By consolidating the literature, the components of a poverty syndrome were specified as: low self-esteem; reduced strivings and aspirations; a limited time orientation (the day-after-tomorrow); and an untraditional linguistic style. One of the most interesting areas was one we called "search ability," or the capacity to locate and utilize sources of information within the social environment. The concept is closely allied to Paul Lazarsfeld's notion of "effective scope" and to James Coleman's idea of "competence." All imply that the poverty-level child has less space in which to move. Seurch ability seems to vary with social class. For example, the lower class student is less likely to know about school guidance facilities; the poverty-level family is less likely to know where to express complaints about consumer concerns or how to find low-cost legal services. Probably search ability can be learned, although it clearly entails motivational features.

Additionally, there are distinct sociobiological correlates to poverty: malfunctions in development, poor mental health, and poor physical health. Researchers ascribe a set of learning difficulties to malnutrition in the early years of life. Fortunately, there are some signs that this destructive process can be reversed.

Compensatory education is intended to offset certain deprivations in the life experiences of the poor. Though research can point up some of these inadequacies, the policymaker is still left with some fundamental questions. Is our goal to help young people adjust to their real-life opportunities, or do we want to aim at fundamental changes in the opportunity structure itself?

Report

Pasanella, Ann K. Defining the Poverty Syndrome. New York: Bureau of Applied Social Research, Columbia University. 1975.

Contractor: Ann Pasanella
Center for the Social Sciences
Columbia University
420 West 118th Street
New York, New York 10027

CHAPTER II. RESEARCH ON SERVICES

NIE NATIONAL SURVEY OF COMPENSATORY EDUCATION[1]

Purpose

The purpose of this survey, conducted during the 1975-76 school year, was to accurately describe the nature and extent of services provided by school districts for compensatory education using Federal Title I funds and/or state funds. The survey was designed to provide nationally representative data at the school district, school building, and classroom levels. Information in three broad areas was sought: fiscal practices, compensatory education practices, and recipient description. Analyses of the data have yielded statistics on the extent of district compensatory education programs, the number of students receiving various services, the nature of compensatory instructional services, and numerous additional special tabulations and analyses.

Method

The Sample. The population surveyed consisted of all elementary and unified public school districts receiving Title I funds in the continental United States. The sample of districts chosen with probability proportionate to total enrollment was stratified by three enrollment size groups, by four regional groups, and by the presence or absence of a state compensatory education program. A total of 100 districts was selected. Within each selected district, three independent samples were drawn:

1. A simple random sample of Title I schools (N = 500)
2. A simple random sample of compensatory education instructional teachers (N = 1,300)
3. A sample of compensatory education homeroom teachers (N = 1,300)

Each of these three subsamples is nationally representative.

The Data. Six distinct interviews/questionnaires were administered, and additional fiscal and demographic data were collected at the district level.

1. State-Level Questionnaire. The sample of districts came from 37 States. In each State, an interview was conducted with a member of the state Office of Education.
2. District-Level Questionnaire. In each selected district, an interview with the district staff person responsible for compensatory education was conducted.
3. Principal Questionnaire. The principal of each Title I school sampled was interviewed.
4. Provider Questionnaire. Interviews were conducted with a sample of teachers who provided compensatory education instruction.
5. Homeroom Questionnaire. Interviews were conducted with a sample of teachers responsible for the students receiving compensatory education instruction.
6. Parent Advisory Council (PAC) Interview. Interviews were conducted with Parent Advisory Council chairpersons at the district level and at each Title I school sampled.

[1] Data from this study are being placed in an archive. A description of the archive project may be found on p. 55.

Findings

The findings thus far are presented in Chapter III of Evaluating Compensatory Education: An Interim Report on the NIE Compensatory Education Study, the volume entitled Compensatory Education Services, and Chapter V of Title I Funds Allocation: The Current Formula.

Secondary analyses of the survey data are currently being conducted. A final report, available June 30, 1978, will present findings related to several topics: the relationship between school poverty and compensatory services; teacher training practices; PAC activities; state compensatory education practices; local district planning and evaluation; and program costs. Findings on local management and evaluation will also be presented in the September 1978 NIE final report to Congress.

Reports

National Institute of Education. Compensatory Education Services. Washington, D.C.: The National Institute of Education, U.S. Department of Health, Education, and Welfare. July 31, 1977.

National Institute of Education. Evaluating Compensatory Education: An Interim Report on the NIE Compensatory Education Study. Washington, D.C.: The National Institute of Education, U.S. Department of Health, Education, and Welfare. December 30, 1976.

National Institute of Education. Title I Funds Allocation: The Current Formula. Washington, D.C.: The National Institute of Education, U.S. Department of Health, Education, and Welfare. September 30, 1977.

Contractors: National Opinion Research Center
6030 South Ellis Avenue
Chicago, Illinois 60637

Policy Research Corporation
35 East Wacker Drive
Suite 1920
Chicago, Illinois 60601

Stanford Research Institute
Menlo Park, California 94025

ESEA TITLE I NONINSTRUCTIONAL AUXILIARY SERVICES FOLLOW-UP CASE STUDIES

Purpose

At the outset of NIE's study of compensatory education, little was known about the noninstructional auxiliary services offered by school districts as part of their Title I programs. The NIE National Survey of Compensatory Education obtained nationally representative summary information about these services, their costs, and the numbers of students receiving them. To supplement these data, NIE undertook a series of case studies in 18 of the survey districts to examine:

1. The nature of the services provided to Title I students in areas such as health, guidance counseling, social work, transportation, and parent involvement activities
2. How children are selected to receive these services
3. Districts' rationales for providing the services
4. How the services and the levels at which they are funded have changed during the school years from 1973-74 through 1976-77

Method

The case studies are based on interviews conducted between late February and mid-May 1977 in 18 school districts. The districts, a subsample of those that had participated in the earlier national survey, were selected on the basis of their expenditures for Title I auxiliary services during the 1975-76 school year. The sample included six districts funding a single service, six with two or more services, and six with no services.

The interviews consisted of two main parts. During the first part, the interviewer collected general factual information on the size of the district and its Title I program, the kinds of auxiliary services offered in the district, the total budget allocation for each service, and the number of students receiving each service. This information was gathered for each of the 4 school years from 1973-74 through 1976-77. The interviewer then obtained further detailed information about a selection of the district's services (e.g., number of schools offering the service, major

budget categories, number and training of personnel providing the service).

The information collected during the first part of the interview provided a background for the second part, an informal conversation between the interviewer and the respondent about the district's Title I auxiliary services. These conversations, all but two of which were tape recorded, covered such topics as the district's needs assessment for its auxiliary services, how the services are delivered to students, the goals of the services, the district's evaluation of its services, and alternative services available in the district. The major focus of the discussions, however, was on the changes that had taken place in the district's auxiliary services during the 4-year period studied, the factors influencing those changes, the process through which the district had decided to effect them, and the impact of the changes.

Findings

The case studies provide a general picture of the kinds of auxiliary services school districts have been offering as part of their Title I programs, how districts go about planning for these services, and the typical problems and pressures for change they have had to confront in maintaining them. Within the limited scope of the study, the aim was not to evaluate auxiliary service programs, but to provide a straightforward account of the district officials' own descriptions and evaluations of their programs.

As a group, the case studies show an overall decline both in the number of Title I auxiliary services offered by school districts and in the level at which the various services have been funded over the past 4 years. The factors mentioned most often in accounting for this decline include:

1. Reductions in a district's overall Title I allocation
2. Increases in the cost of maintaining both instructional and auxiliary service programs
3. Increasing emphasis by both state and local district officials on the instructional goals of Title I
4. Problems in ensuring that auxiliary service programs supplement rather than supplant other services
5. Local needs assessments and evaluations of existing auxiliary service programs

The one area in which expenditures for auxiliary services increased over the 4 years is parent involvement. A number of districts created new programs or enlarged existing ones in response to the Federal mandate for Parent Advisory Councils.

While district officials uniformly acknowledged the primacy of the instructional goals of Title I, most felt that their auxiliary service programs had made valuable, though often indirect, contributions to the attainment of those goals. Many commented, however, on the difficulty of demonstrating the extent of those contributions. Some districts have eliminated auxiliary services because their impact could not be adequately measured.

Report

Followup Study of Non-Instructional Auxiliary Services--ESEA Title I. NORC Project No. 4245. Chicago, Illinois: National Opinion Research Center. July 1977.

Contractor: National Opinion Research Center
6030 South Ellis Avenue
Chicago, Illinois 60637

CHAPTER III. RESEARCH ON STUDENT DEVELOPMENT

ROLE CHANGE INTERVENTION: AN ALTERNATIVE DESIGN TO CONTRAST WITH CURRENT PRACTICES IN COMPENSATORY EDUCATION

Purpose

The planning of compensatory education requires not only an examination of methods that have already been tried, but also investigations of promising alternatives. The purpose of the Role Change Intervention project was to examine one such alternative. The innovative instructional procedure proposed as an alternative to current methods was the use of older students to tutor younger students on a one-to-one basis as an integral part of the older students' education. Because they must regularly act as tutors, older pupils find new interest and motivation for school work. They learn the work thoroughly themselves and assist significantly in the learning and social development of younger pupils.

Method

Three implementation models were proposed: the Learning-Tutoring Cycle (LTC), the Morning as Teacher Semester, and the Learning-by-Tutoring School-Within-a-School.

To subject the proposal to scrutiny from a variety of perspectives, an interdisciplinary committee was established which worked with project staff and participated in a 3-day conference along with reviewers selected by the National Institute of Education. Other project activities included a nationwide survey, presentation of the ideas to inner-city teachers and parents and assessment of their responses, reviews of relevant theory and of the existing literature, and direct observation of tutoring projects in schools.

Findings

It was found that the Learning-Tutoring Cycle was widely acceptable, feasible in terms of costs, and generally consistent with the framework of current Title I regulations. Despite growing recognition of the impact of tutoring on the tutor's learning, the survey indicated that the majority of current tutoring projects are planned around the learning needs of the tutees, leaving the tutor's learning to chance and thus reducing the total impact of the project. Moreover, with only a few exceptions, tutoring projects are small-scale and optional additions to regular schooling, running on shoestring budgets rather than being well-funded compensatory education efforts.

Reports

In view of the need to speak to various audiences about diverse topics such as theories, research, policy, practical planning, and innovative ideas, seven separately bound volumes were prepared. The CSE Reports on Tutoring included:

Report A The Learning-Tutoring Cycle: An Overview

Report #1 Setting Up and Evaluating Tutoring Projects

Report #2 Tutoring and ESEA Title I

Report #3 A Survey of Tutoring Projects

Report #4 Tutoring: Some New Ideas

Report #5 An Analysis of the Literature on Cross-Age Tutoring

Report #6 Tutoring and Social Psychology: A Theoretical Analysis

These seven reports provide an information base and a rationale for actions at both Federal and local levels.

The six numbered reports represent a resource for the planning of tutoring projects by school site personnel or school district personnel. Three reports--the survey (#3), the literature report (#5), and the social psychology report

(#6)—bring together information from a wide range of sources to provide background knowledge concerning current practice, the perceptions and recommendations of practitioners, past projects, research, and relevant theories.

This background knowledge can inform the design of tutoring projects as well as provide a basis for judging the likelihood of success of such projects. For example, the social psychology report demonstrates that many of the effects of tutoring widely noted by practitioners, but not yet established by research on tutoring, have their parallel in recognized effects in the field of social psychology. Social psychology theories thus suggest variables that can be assessed in research on tutoring and lend support to the perceptions of practitioners.

The three other numbered reports apply the background information to practical school planning concerns. Report #1, through a presentation of step-by-step planning questions, deals with the process of setting up and evaluating tutoring projects in general. Report #2 introduces the ESEA Title I legislation and considers the planning steps, as per Report #1, in relation to the design of an LTC project and in conformity with Title I regulations. Report #4 deals with extensions of the idea of learning by tutoring to more ambitious projects, representing more substantial changes in schooling than are involved in the LTC project. Report #4 also documents the reactions of instructional staff and some Title I parents to the Learning-Tutoring Cycle and other proposed kinds of projects.

Report A provides an overview of the project and recommendations for action for both local school districts and Federal policymakers. The actions recommended are designed to put the ideas of this study to the test, to see whether the Learning-Tutoring Cycle can indeed significantly improve the educational attainment of disadvantaged students.

Contractor: Center for the Study of Evaluation
University of California at
Los Angeles
Graduate School of Education
Los Angeles, California 90024

FEDERAL STRATEGIES FOR DELIVERING BASIC SKILLS ASSISTANCE TO SECONDARY SCHOOLS AND STUDENTS

Purpose

Although most compensatory education programs and funds are focused on early childhood education, the need does not end at the 3d grade. Gains achieved by early childhood programs often do not persist, and experience shows that educational intervention in the primary grades will not necessarily prevent later difficulties. The problem is compounded by the reduction of time devoted to basic skills in the school curricula of intermediate and secondary schools. This policy study addressed the problem of providing better basic skills for youth.

Method

The project compiled available options for Federal programs to aid the Nation's schools in improving the command of basic skills of those graduating from high school or leaving before graduation. From these options, four programs were constructed for consideration by the Federal Government. The features of each proposal are described, the advantages and disadvantages pointed out, and comparative costs discussed.

Findings

There is research evidence that students in later grades can benefit from compensatory education programs that use appropriate techniques.

Proposal A is based on a modification of Title I, adding a new program to the existing framework. Proposal B outlines a program for encouraging basic skills by using achievement criteria measures. Proposal C is based on block grants to States for encouraging basic skills, and Proposal D is based on direct grants to local school districts to assist them in changing emphasis.

Report

Larson, Meredith A., George W. Black, David L. Kirp, Michael D. Kirst, Stephen Kutner, and Harold R. Winslow. Better Basic Skills for Youth: Four Proposals for Federal Policy. Menlo Park, Calif.: Stanford Research Institute. April 1977.

Contractor: Educational Policy Research Center
Stanford Research Institute
Menlo Park, California 94025

RESTORATION DESIGN: AN EMANCIPATORY STRATEGY

Purpose

In response to provisions in the Education Amendments of 1974, the Fanon Research and

Development Center was awarded a contract to study "alternative designs to contrast with current practices in compensatory education."

The design is characterized as an "emancipatory strategy," since its intent is to involve children in action now. It seeks to remove the restraints of an educational ideology that is designed to fit children into a future defined by adults seeking to replicate themselves.

The specific purposes of the design are:

1. To specify what education as a developmental process ought to be, i.e., to define the unity between schooling and education

2. To fundamentally examine the relationship between theory (ideology) and practice and, in this context, to develop an alternative design predicated on the concept of primary inclusion as a set of principles alternative to the principles implicit in the compensatory education design

3. To outline a possible model growing out of practice and, in this context, to explore the legal implications, feasibility, and costs of implementing such a model

Method

An informal Delphi technique was the central method used to crystallize the premises and practices of a group of persons with demonstrated success in educating the children of the poor, either as parents, teachers, administrators, or researchers.

A monthly 2-day workshop strategy provided the central forum for analyzing the data. These workshops, which spanned a period of 12 months, involved (1) presentations, discussions, and small-group meetings with consultants, committee and consortium members, and community representatives and (2) feedback from on-site observation of and participation in alternative programs in Los Angeles, San Diego, Milwaukee, and Florida schools.

There were four phases of the project:

Phase I. Data gathering and initial formulation, in which data, implicit principles, practices, and impact associated with numerous models were examined. In particular, the relationship between theory and practice was studied in an effort to define central principles.

Phase II. Development of central principles of an alternative design. Key issues and conclusions drawn from Phase I were used as a starting point for defining new ideology, value premises, rationale, and objectives for an alternative model.

1. Four major principles were outlined that would guide the development of a new kind of institution/learner relationship and lead to alternative theoretical foundations on which new educational strategies and practices could emerge.

2. The concept of "primary inclusion" was articulated as the educational practice to achieve the model's central objective of engaging the child in learning.

3. The component parts of model, program design (including curriculum organization patterns, parental involvement, community involvement, services, etc.) and evaluation design and techniques (including methods, models, planning, etc.), were further elaborated in the remaining workshops of Phase II.

Phase III. Review and analysis of data on judicial policies and current practices that lead to establishing the kinds of schools described by the model. Then an analysis of three possible approaches to implement the model was conducted, followed by the identification of one approach as the most beneficial. Two school systems (Federation of Independent Schools in Milwaukee and South Central Los Angeles School District) were also identified that could be used for beginning demonstration programs.

The general cost for one community school based on Fanon Restoration concepts was estimated by:

1. Defining the educational demonstration program

2. Determining the resource requirements

3. Estimating the general dollar costs of those resources

A comparative analysis of the expenditures of 10 Title I and 10 non-Title I Los Angeles City schools was used to estimate a cost range that would not exceed current district expenditures.

Phase IV. Review of the completed document for adherence to national goals and project objectives. Feedback was received, and revisions suggested during the national conference were incorporated into the document. The final document was reviewed and critiqued.

Findings

The final study design is available in Fanon Center Restoration Model: An Emancipatory Strategy for Education, which is one of the reports listed below.

Reports

Aubry, Ernest. A Guide to Legal Provisions Concerning Parental Participation in Educational Program. Los Angeles: Ernest Aubry. 1975.

King, Lewis M. "A Restoration Design in Education." Paper presented at University of Minnesota, Social Welfare, St. Paul. 1976.

King, Lewis M. "Blonde Wig, Black Child--Towards a Scientific Psychology." Paper presented at Association of Black Psychologists, Boston, Mass. 1975.

King, Lewis M. Fanon Center Restoration Model: An Emancipatory Strategy for Education. Los Angeles: Fanon Research and Development Center. May 1977.

King, Lewis M. A Global Model - Urgent Necessities in Educating Children of the Disadvantaged Circumstances. Los Angeles: Fanon Research and Development Center. 1975.

Madison, Anna. Compensatory Committee Reference Booklet. Los Angeles: Fanon Research and Development Center. 1975.

Madison, Anna. Summary and Critique of Compensatory Education Evaluation. Los Angeles: Fanon Research and Development Center. 1975.

Seeley, John. Evaluation of Present Practices of Compensatory Education. Los Angeles: Fanon Research and Development Center. 1975.

Seeley, John. A Preliminary Position Paper on Alternatives to Compensatory Education. Los Angeles: Fanon Research and Development Center. 1975.

Contractor: Charles R. Drew Post-Graduate Medical School
Fanon Research and Development Center
12012 Compton Avenue
Los Angeles, California 90059

CONTRACT PUBLIC SCHOOLS: A STRATEGY FOR DEVELOPING MORE EFFECTIVE COMPENSATORY EDUCATION PROGRAMS

Purpose

Many educators feel that several characteristics of today's public school system are barriers to the organizational and programmatic change needed to meet the special educational needs of poor children. The purpose of this project was to plan a cost-conscious school that learns, through its own experience, how to combine traditional educational values with modern instruction technology. This school would offer effective instruction and, at the same time, be most responsive to attending children and their parents.

Method

A committee of experts who have wide experience with compensatory education programs was chosen to develop the school design. The committee members either were known for their expertise in policy formulation at the Federal, state, and local levels, in compensatory education program development and operation, and in school law, school finance, architecture, and classroom teaching, or were parents of children in compensatory education programs at the time of the project. Certain members were responsible for dealing with specific aspects of the design, while others read, critiqued, and suggested refinements in all of the design's components.

Findings

It is proposed that Contract Public Schools (alternative elementary schools) be established within local school districts to develop more effective compensatory education programs. Each school will be governed by its own Council of Directors, elected by the parents of enrolled children. (This council is modeled after the most effective of Follow Through's Policy Advisory Committees.) The council's authority to establish policy will be based on a formal three-party agreement among the council, the local Board of

Education, and the state Office of Education. The council will manage the school budget, which consists of the same amount per child as is provided for the education of comparable children in the other schools within the district. Enrollment in a Contract Public School will be voluntary and open to all.

The Contract Public School is intended to give legal status and a set of organizing principles to public alternative schools designed to provide effective compensatory education for poor children. As small flexible units specifically designed to meet local needs, contract schools offer large school districts a low-cost and low-risk mechanism for locally based research and development. Seven steps are recommended to remove existing legal barriers and encourage the implementation of effective contract schools.

Report

Bushell, Don, Jr., Donald A. Jackson, Daniel M. Schember, and Lynn C. Weis. Contract Public Schools: A Strategy for Developing More Effective Compensatory Education Programs. Lawrence, Kansas: University of Kansas. June 1977.

Contractor: University of Kansas
Lawrence, Kansas 66045

LIMITED STUDY ON THE EXTENT OF PARENTAL INVOLVEMENT IN SETTING OBJECTIVES AT THE ELEMENTARY SCHOOL LEVEL

Purpose

During the hearings on ESEA Title I and subsequent committee reports leading to the passage of the Education Amendments of 1974, various proponents argued for the direct involvement of parents in the process by which instructional objectives were to be developed for their children. Such arguments were based on common sense, a general tide of pressure for greater parental involvement in ESEA Title I, and the results of a number of exemplary projects in which such a process was stated to have occurred.

NIE requested that the contractor identify well-implemented programs which involve parents extensively in the instructional process and to describe the general effects of various types of involvement based upon documentation and evaluation reports to date. The study was conducted between December 1975 and February 1976.

Method

ESEA Title I exemplary projects, Follow Through projects, projects nominated by commercial publishers, publications of exemplary programs at compensatory education fairs (such as the National Diffusion Network), projects submitted to the Joint Dissemination Review Panel of OE, and projects documented in the contractor's files were examined. These projects were from more than 250 LEAs in over 30 States.

The preliminary verification of program operations concerned the nature and extent of parental involvement, including involvement in Parent Advisory Councils (PACs), in classrooms as aides, at home in structured instruction situations, and in developing or selecting individual student activities/objectives. This was followed by collection of additional descriptive information on these programs to assist in the analysis of the quality and extent of parental involvement and of the nature and extent of impact on student performance, school/community relations, and other areas. Finally, programs actually using parents in some aspect of the instructional process at the elementary school level in math and/or reading programs in Title I or other compensatory education programs were described.

A total of 319 projects was identified, and characteristics of programs regarding parental involvement were verified. Major problems encountered during the conduct of this limited study included:

1. Differences in interpretation/definition of terminology used in programs involving parents
2. Reluctance of district representatives to focus upon only one aspect of a particular program, i.e., parental involvement
3. The lack of virtually any evaluation reports which attempted to assess the specific contributions of parental involvement in whatever form to various program outcomes
4. The lack of individuals who had firsthand knowledge of the nature and extent of parental involvement, since many of the programs had been discontinued or had been modified significantly, and their staff members had been reassigned

Findings

Direct parental involvement in selection of individual student objectives and activities in compensatory education programs conducted in consultation with the teacher and the child was found to be virtually nonexistent up through the period on which documentation was available for initial selection and verification (1974). In only 4 of more than 250 sites were such procedures identified and verified through telephone contact. In two sites, such parental involvement previously used in a highly structured manner had since been discontinued.

Structured parental involvement in the instructional process, either in the classroom or at home, did exist in a significantly larger number of sites, most of which used Follow Through models which have a component for parental involvement specifically designed.

Many more projects involved parents in an advisory capacity through PACs and other mechanisms which were usually required by funding-source guidelines or regulations, such as ESEA Title I, Follow Through program guidelines, and proposal applications.

Virtually no evaluation reports or evaluation documentation at the program level attempted to identify the contribution, if any, of parental involvement to program impact as measured by student achievement. In a larger number of instances, impacts on school/community relations were documented, mostly in a positive manner. A previous study conducted by Sterns and Peterson (1973) failed to confirm the impact of parental involvement on student performance at levels beyond the preschool stage.

A major conclusion of this study is that parental involvement in its various modes can be justified as an end in itself; however, parental involvement as a means to improve student cognitive skills performance, beyond the preschool level, remains an area yet to be assessed in any rigorous manner.

Report

Report of a Limited Study on the Extent of Parental Involvement in Setting Objectives at the Elementary Level. Washington, D.C.: Education TURNKEY Systems, Inc. March 15, 1976.

Contractor: Education TURNKEY Systems, Inc.
1030 15th Street, N.W.
Washington, D.C. 20005

INSTRUCTIONAL DIMENSIONS STUDY[1]

Purpose

Because of the specific interest of the U.S. Congress in instructional effectiveness, NIE was requested to conduct a study that would include "an analysis of the effectiveness of methods and procedures for meeting the educational needs of children, including the use of individualized written education plans for children . . ." (Public Law 93-380). The Instructional Dimensions Study (IDS) was a 1-year field study designed to meet this request by examining the effects of instructional practices and teacher characteristics on student achievement in, and attitudes toward, reading and math at the 1st- and 3d-grade levels. The major foci of the study were:

1. The effects of individualized instructional practices
2. The effects of instructional settings
3. The relationships of opportunity, motivators, instructional events, teacher background, and costs to achievement and attitudes

Method

A purposive and not representative sample of classrooms in Title I or Title I-eligible schools was selected for the study in order to obtain variation on the degree of individualization, setting for compensatory instruction, and neighborhood economic status. In addition, the instructional program used in participating classrooms had been in operation for at least 1 year prior to the study.

Student achievement and attitude tests and teacher interviews and questionnaires were administered in the fall (1976) and spring (1977). The teacher instruments were combined with videotapes of reading and math instruction and with curriculum analysis results to provide information about instructional practices. General information on program characteristics was gathered from building principals and district administrators.

Data were analyzed from approximately 2,000 1st-grade students, 2,300 3d-grade students, 100 1st-grade and 105 3d-grade regular teachers,

[1]Data from this study are being placed in an archive. A description of the archive project may be found on p. 55.

175 specialist teachers, 100 principals, and 14 district administrators.

The data were organized hierarchically from individual measures and aggregated into 18 dimensions, which were then combined into five elements based on the research design developed by the Learning Research and Development Center. These five elements were individualization, opportunity, motivators, instructional events, and teacher background. Commonality analysis was used to attribute portions of variations in achievement gain to the various elements and to initial (pretest) performance. Costs were also related to achievement gain.

Findings

The research results are generally encouraging about the effectiveness of compensatory education programs examined in this study. Overall, students in grade 1 made average gains of 12 months in reading and 11 months in math during the 7 months between fall and spring testing as measured by the Comprehensive Test of Basic Skills (CTBS). Third graders gained 7 months in reading and 12 months in math on the CTBS. These gains exceed those reported in the most positive recent evaluations of compensatory instruction.

Individualized Instruction. IDS defined individualization of instruction as including: specific learning objectives assigned to individual children, small-group or individual pacing, individual diagnosis and prescription, and alternative learning paths and sequencing for individual children.

Study findings did not, however, show individualized classrooms to be uniquely effective. The IDS results showed substantial gains in reading and mathematics achievement irrespective of the presence or absence of individualization as defined for this study.

Setting. The two alternative settings for compensatory instruction examined by IDS were (1) in-class or mainstream instruction and (2) out-of-class or pullout instruction.

IDS found that 1st graders gained most in mainstream settings in reading and in mathematics. Third graders gained most in mainstream reading, but mathematics gains were equal in the two settings.

Opportunity. IDS examined two types of opportunities given to students. The first, opportunity to learn, can roughly be translated into instructional time. It included measures of length of schoolday, amounts of regular and supplemental reading and math instruction, attendance, class and group size, proportion of students working "on task," and amount of homework.

The second type of opportunity, opportunity to demonstrate learning, is based on the premise that what is learned depends on what is taught. This rather simple assumption implies that programs will appear to be more successful when the content of the test materials is closely related to the curricular content of the instructional program.

IDS found that instructional time was an important determinant of achievement gain and that when instruction emphasized the particular skills on which achievement gains were measured, student achievement gains were especially large. Each of these findings was more pronounced for 1st grade than for 3d grade.

The other elements listed in question 3, motivators, instructional events, teacher background, and costs, were inconsistently or insignificantly related to achievement gain.

Reports

Blaschke, Charles. School Relations: A Supporting Report of the Instructional Dimensions Study, 1976-1977. Washington, D.C.: Kirschner Associates, Inc., and Education TURNKEY Systems, Inc. 1977.

Brady, Mary Ella, Chuck Clinton, John M. Sweeney, Morris Peterson, and Hugh Poynor. Study Findings: A Final Report of the Instructional Dimensions Study, 1976-1977. Washington, D.C.: Kirschner Associates, Inc., and Education TURNKEY Systems, Inc. 1977.

Brady, Mary Ella, and Hugh Poynor. Study Instruments and File Documentation: A Supporting Report of the Instructional Dimensions Study, 1976-1977. Washington, D.C.: Kirschner Associates, Inc., and Education TURNKEY Systems, Inc. 1977.

Peterson, Morris. Data Collection Management: A Supporting Report of the Instructional Dimensions Study, 1976-1977. Washington, D.C.: Kirschner Associates, Inc., and Education TURNKEY Systems, Inc. 1977.

Poynor, Hugh. Executive Summary: A Final Report of the Instructional Dimensions Study, 1976-1977. Washington, D.C.: Kirschner Associates, Inc., and Education TURNKEY Systems, Inc. 1977.

Poynor, Lee H. Curriculum Analysis Procedures: A Supporting Report of the Instructional Dimensions Study, 1976-1977. Washington, D.C.: Kirschner Associates, Inc., and Education TURNKEY Systems, Inc., 1977.

Stimart, Reynold P., and Morris Peterson. Video Data Documentation: A Supporting Report of the Instructional Dimensions Study, 1976-1977. Washington, D.C.: Kirschner Associates, Inc., and Education TURNKEY Systems, Inc. 1977.

Sweeney, John M. Program Cost Analysis: A Supporting Report of the Instructional Dimensions Study, 1976-1977. Washington, D.C.: Kirschner Associates, Inc., and Education TURNKEY Systems, Inc. 1977.

Contractors: Kirschner Associates, Inc.
733 15th Street, N.W.
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INSTRUCTIONAL DIMENSIONS STUDY CONFERENCE

Purpose

The purpose of this conference was to share the results of the Instructional Dimensions Study (IDS) with 39 teachers who participated in it during 1976-77. As a result of the conference, it was hoped that teachers would assist NIE in developing a dissemination document that would interpret the IDS findings in a fashion that made them clear and useful to teachers and administrators in general. In addition, researchers served as recorders of the conference in order that the views expressed by the teachers might be recorded and written in the context of educational research.

Method

Thirty-nine teachers and nine educational researchers attended a 2-day conference held in Washington, D.C. The teachers represented 13 of the 14 districts involved in the IDS. Teachers were generally representative of the proportions of 1st- and 3d-grade, pullout and mainstream, and regular and specialist teachers involved in the study.

The IDS findings were organized around four themes: opportunity to learn; setting; planning, organization, and management of compensatory instruction; and individualization of instruction. A five-page summary of the study results was distributed to the teachers prior to the conference. The conference format included an introductory session followed by four workshops, one on each of the four themes listed above. Teachers were divided into four groups and attended each workshop over the 2-day period. Two researchers observed and recorded each of the workshop sessions. At the end of the 2d day, a closing session was held. Researchers reported the essence of their recording, and questions were answered.

Following the conference, the researchers discussed reactions to each workshop area in the context of educational research literature. A ninth researcher developed an overall discussion of the conference and its implications.

Findings

The conference findings will be presented in a report embodying the researchers' papers and in a broad dissemination document based on these papers.

Reports

The conference report and dissemination document are both expected in September 1978.

THEORY AND PRACTICE IN BEGINNING READING INSTRUCTION

Purpose and Method

Are some ways of teaching beginning reading more effective than others, especially for children in compensatory education programs? What does the research say? Do the research findings agree with what experts in the field say about the theory of reading? These are the questions that were addressed by the Theory and Practice in Beginning Reading Instruction Project. The project brought together over 50 people active in reading research and in the teaching of reading to hear formal papers and to discuss early reading instruction. Papers and discussions considered the effects of instructional practice, as well as psychological and linguistic research on the process of learning to read. The aim of the discussions was to clarify points of agreement and disagreement as a basis for advising educators and

the public on the approaches to instruction most likely to be effective for hard-to-teach children.

Findings

Two Views of Reading. On the basis of the papers exchanged at this project's conferences, it is possible to identify two main strands of theory about the nature of reading. The two strands lead to different kinds of prescriptions for early reading instruction and to different lines of research.

Reading as Translation. One view of reading is that it is essentially the translation of printed symbols into an approximation of oral language, so that already developed capabilities for understanding and using speech can be applied to written language. In this view, the most important thing that must be done in learning to read is to learn what the printed symbols "say." No other activity is unique to reading; everything else is shared with speech. Since the ability to comprehend speech is already present in any individual who sets out to learn to read, only word recognition needs to be directly taught. At most, practice in this new (visual) mode of receiving language messages is needed. Scholars and educational practitioners who hold this view of reading as translation generally advocate reading instruction that devotes predominant--sometimes even exclusive--attention to helping children master the alphabetic code. They suggest that, during the earliest stages of reading instruction, instructional materials--especially for hard-to-teach children--should highlight the predictable aspects of the print-sound code, even if this must be done at the expense of a certain degree of literary elegance. The focus of research that follows from this view of reading tends to be on proficiency in word recognition and the strategies that underlie this proficiency.

Reading as an Autonomous Process. The second view of reading holds that understanding the written word is in certain important ways different from understanding spoken language. Written language is organized differently from spoken language and fulfills different social functions. The mental work of reading is different from the mental work of understanding spoken language. Because it is an autonomous language process, reading cannot be taught as translation to speech. We cannot assume that because people know how to recognize words they will be able to understand and use written language in functional ways. Instead, reading instruction must focus quite directly on the use of written language from the very beginning of instruction. People who view reading as an autonomous language process do not deny that the alphabetic code must be learned. They tend to believe, however, that the code can be learned relatively easily--and that in any case the meaning and interest of written materials cannot be sacrificed even early in instruction. "Look-say" methods of teaching reading were originally designed in response to this concern. The same basic view of the aims of early reading instruction is shared by those who today advocate "language experience" approaches--methods that attempt to use the children's own dictated and written stories as the material for teaching reading, in an attempt to root reading in the direct communication needs and processes of the learner. Basic researchers who view reading as an autonomous system tend to be concerned with the ways in which meaningful written language, in units of a sentence or longer, is processed.

The Evidence from Instructional Practice. Which works better in practice--code-oriented instruction such as the "translation" theorists propose, or meaning- and function-oriented instruction such as the "language" theorists propose? Evidence clearly favoring one instructional approach over another in field settings is difficult to find. Nevertheless, a repeating pattern of findings concerning both what is taught and how it is taught can be detected if we examine several decades of applied research. This pattern can be summarized roughly as follows: When skill in word recognition is the outcome being studied, code-oriented programs tend to show up better than language-oriented programs. This is especially true for low socioeconomic groups and for low achievers in general. However, when comprehension beyond the very simplest levels is the criterion, there is no clear advantage for either code- or language-oriented programs. Concerning instructional style, direct instruction, teacher-controlled use of time, and well-structured curricula have a clear edge, again especially for low-achieving or low-SES groups. These conclusions are drawn on the basis of evidence from (1) several cohorts of Follow Through children; (2) Jeanne Chall's book Learning to Read: The Great Debate, which reviewed hundreds of studies conducted up to about 1964; (3) research reviews conducted by Guthrie and his colleagues for the National Institute of Education's compensatory education studies; (4) reanalyses of data from the Bond and Dykstra 1st-grade studies and the Educational Testing Service study of compensatory reading programs; and (5) the California Teacher Study.

The findings of the Theory and Practice in Beginning Reading Instruction Project suggest several lines of action for national reading policy and for further development and study of reading instruction.

First, as a matter of routine practice, there is a need to include systematic code-oriented instruction in the primary grades, no matter what else is also done. However, there is no evidence that code-emphasis programs alone will "solve" the reading problem. Such programs succeed well in teaching word recognition skills. They show no advantage, however, once comprehension becomes the main criterion of success (starting at about 3d or 4th grade).

For this reason, it is important to work on developing programs that effectively teach the meaning and functional aspects of reading. Two possibilities for such programs need to be pursued: the "language experience" approach, which builds upon children's own writing and dictation, and the "direct instruction" approach.

Report

Conferences on Theory and Practice of Beginning Reading Instruction. Parts I, II, and III. Pittsburgh: Learning Research and Development Center, University of Pittsburgh. June 1976.

Contractor: Learning Research and Development Center
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Pittsburgh, Pennsylvania 15260

INVOLVEMENT OF PRIVATE SCHOOL STUDENTS IN TITLE I

Purpose

This study is concerned with the degree to which Title I provides private school students with the services to which they are entitled. Title I specifically includes nonpublic school children. They are counted in determining the number of low-income children living in a county and therefore help determine its Title I allocation. Under ESEA, nonpublic school students should have the same opportunity to receive Title I services as they would have were they attending public schools.

Method

The NIE National Survey of Compensatory Education collected information regarding the quantity and quality of services delivered to private school students in 100 school districts. This survey established approximate numbers of nonpublic school students involved in Title I programs and the average number of instruction hours they receive. The contractor carried out a second study of approximately 50 school districts in order to review carefully the procedures used by these districts to establish the eligibility of public and nonpublic school students, plan Title I programs, and deliver services.

Findings

The NIE National Survey of Compensatory Education found that:

1. Only 43% of Title I districts with nonpublic school students are providing Title I services to any of these pupils.

2. Services are provided to an estimated 4% of the nonpublic students living in Title I districts.

3. While participating public school children receive an average of 3½ hours of compensatory instruction per week, nonpublic school pupils receive an average of 1 hour per week.

The second study, done by the Council of American Private Education, found that:

1. In most of the local educational agencies studied, children with the same level of educational disadvantage had less chance of receiving Title I services if they were enrolled in private schools, and they received fewer and poorer services.

2. Only 10% of state educational agencies consistently examined the degree to which local educational agencies involve nonpublic school children.

3. Fewer than 25% of the local educational agencies studied surveyed the nonpublic school population for eligible students. Most simply guessed at the nonpublic student population and its Title I needs.

Report

Vitullo-Martin, Thomas W. Summary Report: Delivery of Title I Services to Nonpublic School Students. New York, N.Y.: Council on American Private Education. Interim Report, October 1977.

Contractor: Thomas W. Vitullo-Martin
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TRAINING AND EXPERIENCE OF COMPENSATORY EDUCATION TEACHERS

Purpose

Title I was enacted, in part, on the premise that the American educational system had largely failed poor and minority children. Among the approaches to improving instruction of such children is to improve the quality of the teaching they receive. This has been done by providing teachers with special training designed to be particularly suited to compensatory education students or by selecting teachers who have had special training. In addition, teachers who have special training may be providing compensatory education even without special district training or selection programs.

The questions addressed in this study are:

1. To what extent do school districts offer special training programs to their compensatory education teachers?
2. What types of training do districts offer?
3. How do districts select compensatory education teachers?
4. What are the qualifications of compensatory education teachers?

Method

The National Survey of Compensatory Education collected information about Title I and state compensatory education services delivered by a nationally representative sample of school districts. As one part of the survey, questions were asked about: district use of Title I funds to provide teacher training, district teacher assignment criteria for compensatory education teachers, and teachers' formal education; recent inservice training and college courses; and teaching experience. The data collected from this series of questions were then analyzed to answer the study questions.

Findings

The study showed that nearly three-quarters of the local educational agencies (LEAs) that receive Title I funds did provide some teacher training in 1975-76. However, this training was funded from a variety of sources. Only about one-quarter of these Title I districts used Title I funds to support inservice training. This amounted to $8.322 million in expenditures, or less than 0.5% of the $1.739 billion in Title I expenditures.

Various types of training were considered to be important, and no single subject matter or skill area emerged as consistently necessary. The most highly ranked training content area was instructional content, but other areas, such as instructional support, planning, evaluation, and philosophical and background topics, were also frequently important to LEA programs. The training methods favored by LEAs were informal and short term (e.g., staff meetings, workshops, and consultations with specialists) rather than formal, academic, and long term.

Methods for selecting compensatory education teachers usually involved selection by district personnel and principals. About one-third of the LEAs accepted volunteers, and one-sixth used other recruitment methods such as selection by parents. The most popular criterion for selection of compensatory education teachers was academic training in compensatory education. About one-third of the Title I districts used experience working with educationally disadvantaged children as a criterion. A wide variety of other criteria were also used in various districts.

Compensatory education teachers generally had high levels of formal and informal training and of teaching experience. The high level of formal training is reflected in the fact that over 65% have at least a master's degree, whereas about 27% of homeroom teachers of compensatory education students, most of whom do not provide compensatory education instruction, have master's degrees. Recent, informal (i.e., inservice) training is also typical of compensatory education teachers. Over 64% received some training in the 6 months prior to being interviewed, compared with about 21% of homeroom teachers of compensatory education students. The amounts of recent training are similar, averaging about 25 hours for compensatory education teachers and about 23 hours for homeroom teachers. Finally, compensatory education teachers, like homeroom teachers of compensatory education students, are generally experienced teachers. Each group averages about 10 years of teaching experience.

These data suggest that Title I does in fact provide special services to students by employing

specially trained teachers to deliver compensatory instruction. The findings also refute charges that low achievers are shortchanged in their instruction by being delegated to the least qualified teachers or to teachers who have little career commitment to compensatory instruction. Further, the fact that experienced and highly qualified teachers are providing compensatory instruction combined with the fact that districts select compensatory education teachers based on their teacher training and experience in compensatory education (rather than using teacher seniority) suggests that districts are not placing teachers into compensatory education positions as a way to keep them employed as the number of teaching jobs declines.

Report

Findings will be reported in NIE's final report to Congress, which will be available in September 1978.

REVIEW AND SYNTHESIS OF STUDIES OF ACTIVITY-BASED APPROACHES TO MATHEMATICS TEACHING

Purpose

The primary objective of this review was to identify the most viable facets of activity-based instruction, especially as these might apply to children needing compensatory education.

Method

To accomplish the purpose, four procedures were followed:

1. A comprehensive data base on activity-based approaches to mathematics instruction in grades K-8 was compiled.
2. Program components and factors related to the use of materials were analyzed.
3. Results and conclusions were interpreted.
4. Findings from separate reports and studies were synthesized into a set of recommendations for activity-based teaching which shows the greatest promise for maximizing mathematics achievement and improving attitudes toward mathematics.

The research studies to be analyzed were selected on the basis of:

1. Appropriateness of level and content
2. Appropriateness of the type of material or approach, with emphasis on research reports which present a clear, explicit description of the procedures followed
3. Evaluation of the experimental-type studies in order to exclude studies so poorly designed that their findings are meaningless

Findings

In almost half of the considered studies, students having instruction in which manipulative materials were used scored significantly higher on achievement tests than students who had instruction in which manipulative materials were not used. In almost the same number of studies, the two groups scored much the same; few instances were found in which the group not using materials scored higher. Thus, lessons using manipulative materials have a higher probability of producing greater mathematics achievement than do non-manipulative lessons.

Only 3 of 28 findings favored the use of symbols alone; only one study favored pictorial treatments used alone. In seven instances, use of manipulative materials was favored over sequences in which manipulative materials were not used. In nine instances, use of manipulative materials and pictorial representations resulted in higher achievement than use of symbols alone. The concrete thus appeared to play an important role in effective programs.

Research in which the number of embodiments for a mathematical idea has been the focus resulted in no significant differences in achievement in three of four studies.

In three of eight studies, manipulation of materials by students was favored over having students watch the teacher demonstrate with materials. In four other studies, no significant differences were found. It appears that individual manipulation by the learner is not the only way children learn; it can be effective to watch the teacher demonstrate.

Across a variety of mathematical topics, studies at every grade level support the importance of the use of manipulative materials. Little

evidence was found that manipulative materials are effective only at lower grade levels.

The use of materials appears to be as effective at one achievement and one ability level as at another--that is, high achievers and those with high ability profit from the use of materials as much as low achievers and those of low ability.

Although the data are sparse, the use of materials appears to be at least as effective at one socioeconomic level as at another.

Students using activity-oriented programs or units can be expected to achieve as well as or better than students using programs not emphasizing activities.

Certain games can be used to promote specific learning outcomes, but research has not yet clearly focused on the effectiveness of games for teaching basic elementary school mathematics topics.

Reports

Higgins, Jon L. "The Role of Activities in Mathematics Instruction." Unpublished paper presented at the 1976 Annual Convention of the School Science and Mathematics Association.

Suydam, Marilyn N., and Jon L. Higgins. Activity-Based Learning in Elementary School Mathematics: Recommendations from Research. Columbus, Ohio: ERIC Center for Science, Mathematics, and Environmental Education. September 1977.

Suydam, Marilyn N., and Jon L. Higgins. Review and Synthesis of Studies of Activity-Based Approaches to Mathematics Teaching. Final Report, National Institute of Education, Contract No. 400-75-0063. September 1976.

Suydam, Marilyn N., and Alan Osborne. "Review of Research on Manipulative and Other Materials." In A Literature Review and Analysis Related to Assessment of Needs and Existing Practices in U.S. Schools in Pre-College Natural Science, Mathematics, and Social Education: Mathematics Education Report. Final Report, National Science Foundation, Contract No. C76-20627. August 1977.

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RELATIONSHIP OF STUDENT ACHIEVEMENT TO COMPONENTS OF READING PROGRAMS AND ENVIRONMENTAL CHARACTERISTICS

Purpose

Local education monies and national compensatory education funds are frequently focused on special programs to improve the reading achievement of elementary school students. This study examined characteristics of many different reading programs and was directed toward identifying those characteristics associated with reading achievement test gains. Such information should be helpful to educators and policymakers since it increases our understanding of the effects of the allocation of resources within the school for reading programs.

Method

Reports of recently implemented reading programs were located, and data including school and program descriptors, as well as individual student achievement scores, were solicited from project staff in 36 communities. The data were analyzed to determine the relationship between achievement gain scores and program characteristics and also to identify characteristics of the schools serving the poorer readers. A second part of the study analyzed reading achievement tests and speculated about differences in achievement at different elementary grade levels.

Findings

Characteristics of Schools Serving a Large Number of Poorer Readers. In these programs, students who were considered poorer readers came from larger schools in lower socioeconomic urban areas with fewer white students. In these schools there was less teacher training, less teacher curriculum development, fewer consultants, and fewer dollars spent per pupil. However, there were more social workers for students, as might be expected because of the students' greater problems. Other differences seemed to vary with grade level.

Program Characteristics Related to Gain Scores for Low-Achieving Groups. This research provided evidence that program characteristics do contribute to differences in the reading achievement gains for low-achieving students even after accounting for socioeconomic level and ethnicity.

Several program characteristics were frequently associated with higher gain scores for the low-achieving groups and warrant further attention. These were: individual or small-group instruction, reading specialists, teacher training, and Parent Advisory Councils.

The nature of the contribution of program components to gains varied across and within grade levels for different programs. This finding indicates that no one approach to reading instruction is consistently the most effective. Rather, programs that address problems specific to their locale and student needs should be encouraged.

Differences in Achievement Tests and Test Performance Across Grade Levels 1-6. Analyses of reading achievement tests indicated that the tests differ widely in their structure and content, with some tests requiring more complex responses and others providing more difficult questions. Nonetheless, no one measure was found to be consistently more demanding than any other. It was determined, however, that test scores reflected different skills in different tests.

Comparison of test performance across tests, using cross-sectional data, indicated that low-scoring students made different gains at different grade levels. Yearly growth measured by reading achievement tests was slightly better at the lower grade levels. However, most startling was the drop in test scores between the end of one school year and the beginning of the next. These data suggest that the "loss" over the summer may be a major contributor to steadily decreasing scores.

Report

Popp, Helen M., and Marcus Lieberman. A Study of the Relationship of Student Achievement to Components of Reading Programs and Environment Characteristics. Cambridge, Mass.: Harvard Graduate School of Education. May 1977.

Contractor: Harvard University
Graduate School of Education
Ray E. Larsen Hall
Cambridge, Massachusetts 02138

LOCUS AND NATURE OF READING PROBLEMS IN ELEMENTARY SCHOOLS

Purpose

In all elementary schools in the United States, teachers attempt to help children acquire basic reading processes and proficient reading practices. To a greater or lesser degree, teachers engage children in certain activities designed to teach them how to read.

This study addressed two questions: to what degree do the characteristics of reading instruction programs influence pupils' achievement, and to what degree are these effects dependent on students' previous achievement, reading level, age, socioeconomic status, and sex? A broad synthesis of previous research on reading problems also was conducted.

Method

The central element of this study is based on a reanalysis of data collected for the U.S. Office of Education by the Educational Testing Service under a contract entitled "A Descriptive and Analytic Study of Compensatory Reading Programs." The data base consists of information from 264 schools on 57,694 children. The sampling unit used is an instructional group in reading, and the variables chosen for investigation fall into two categories--instructional time and instructional emphasis.

Through a series of analyses of covariance, the effectiveness of compensatory reading programs for different grade and socioeconomic levels and for various reading skills was assessed. The same data set was used to examine, through analysis of variance, the difference between children in regular versus compensatory programs on different skills, such as decoding and comprehension, at different grade levels.

Findings

Within the constraints of the investigation, instructional characteristics of reading programs were observed to have an impact on reading achievement. The findings suggest that time in formal reading instruction is an educational variable that is likely to increase achievement in reading. Specifically, the research concludes that:

1. Instructional time in formal reading instruction had the greatest impact on children in 2d-grade compensatory education programs.

2. Instructional time seemed to influence low-SES children more than middle- and high-SES children at the 6th-grade level. At the 2d-grade level, the combination of time and SES was not important.

3. The type of instructional emphasis in reading programs had less impact on achievement than the amount of instructional time.

Report

Guthrie, John T., S. Jay Samuels, Victor Martuza, Mary Seifert, S. Jane Tyler, and Glenace Edwall. A Study of the Locus and Nature of Reading Problems in the Elementary School. Sections I and II. Newark, Del.: International Reading Association. June 30, 1976.

Contractor: International Reading Association
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CHARACTERISTICS OF EFFECTIVE INDIVIDUALIZED INSTRUCTION PROGRAMS

Purpose

The main purpose of this study was to identify the characteristics of effective or successful individualized instruction programs, including both compensatory education programs and programs serving a broader student population. More specific objectives of the study were to compile and analyze available information to provide answers to the following questions:

1. What are the major definitions of the term "individualized instruction" in the literature, and how do they differ?

2. What program elements or variables appear to be characteristic of successful or effective individualized instruction programs?

3. How do successful or effective individualized instruction programs cluster in terms of theoretical models or empirical groups?

4. How appropriate are the various assessment instruments used to measure the effectiveness of individualized instruction programs?

Method

The approach to the study of the characteristics of effective individualized instruction programs called for reviewing the work of other evaluators and applying a series of screening criteria in order to identify effective or successful programs of individualized instruction. Evaluation reports on program effectiveness were identified, obtained, and reviewed for appropriateness. From those programs identified as successful in the evaluation reports, those that were individualized were selected based on a broad definition of "individualized instruction." The specific criteria used to select the individualized programs were:

1. The program must be an instructional program for students in which the teaching of reading, mathematics, or both is a primary goal.

2. The instructional program must allow each student to pursue a formal or informal program or course of studies planned by, with, or for him on the basis of a diagnosis of his learning needs or requirements.

3. The instructional program must have been in use at the elementary level (K-6).

4. The instructional program must have demonstrated cognitive or affective benefits.

5. The program should not be classed as a bilingual program or be targeted exclusively for physically or mentally handicapped children.

Seventeen "popular" programs of individualized instruction not identified from the evaluation reports were also included in the study. Any information needed about the individualized instruction programs other than what was contained in the evaluation reports was then collected. Information about the 74 successful reading programs and the 42 successful mathematics programs which were included was then coded and used to analyze and synthesize findings. Reviews of the literature were made, as necessary, to determine the major definitions of the term "individualized instruction" and to obtain the opinions of various authors about the appropriateness of assessment instruments used to measure program effectiveness.

Findings

On both the theoretical and operational levels, programs of individualized instruction are heterogeneous.

1. Among the individualized instruction programs identified as effective or successful, 58% of the reading programs were targeted for disadvantaged or low-achieving students, while 37% were targeted for all students. Conversely, more mathe-

matics programs were targeted for all students (60%) than for disadvantaged or low-achieving students (36%).

2. The successful individualized instruction programs that were identified were used in one or more of three ways: for all of the instruction in reading or mathematics; for supplemental or remedial work; or for enrichment work. Most of them (62%) were used for all of the instruction in reading or mathematics, and all of the students in a given grade level or all of the students in the school usually attended. When a program was used primarily for supplemental or remedial instruction, the students who attended were usually identified by a formal diagnostic procedure.

3. Some of the successful individualized instruction programs were used in small schools or school districts, while others were used in large schools or districts. Many, however, were used by only a relatively small number of students. About 40% of the successful individualized programs identified in this study were used by fewer than 500 students.

There seem to be a number of instructional features or practices common to most of the identified successful programs of individualized instruction. Some of them are:

1. Most of the successful programs had written instructional objectives. About 90% of the programs had written instructional objectives, and for 75% the objectives were quite specific. For about 70% of the programs the instructional objectives were developed by program staff, rather than having been adopted from another source.

2. Student learning needs or requirements were diagnosed frequently. About 25% of the programs provided for daily or continuous diagnosis, 46% for diagnosis at the beginning of a unit of instruction, and 46% for diagnosis at the beginning of a semester or school year. Many programs provided diagnosis at more than one of these points. Criterion-referenced achievement tests were the most often used source of data on individual student learning needs and requirements upon which programs of studies were prescribed. They were used for about 72% of the successful programs. Student past performance was also a frequently used source of diagnostic data (39%).

3. Eighty-four percent of the programs studied provided instruction five times per week. Several programs provided instruction four times or less per week. However, the length of the instructional period per day ranged from less than 15 minutes to over 90 minutes.

4. In most of the successful programs of individualized instruction, a given unit of instruction was studied until a specific level of mastery was reached. This was found for 77% of the successful programs. About 80% of the programs allowed each student a different amount of time to complete a unit of instruction, and most of these allowed the student to start a new unit as soon as the previous one was completed. These are two conditions necessary for self-pacing, or allowing students to progress at their own rate.

5. Most of the successful programs used a variety of instructional materials. Eighty-six percent of the successful programs used a wide range of learning materials, while 87% had alternative materials that could be used for mastering a given instructional objective.

6. A number of class organizations for instructional purposes were used by most of the successful programs. In 75% of the programs, students worked independently, with occasional guidance as needed. Small groups of two

to five students were taught in 73% of the programs, while tutoring was used, as needed, in 47%.

7. Successful programs attended by students who had been identified through formal diagnostic procedures tended to have a smaller class size.

Some instructional features or practices often considered necessary for successful individualization do not seem to be essential. For example:

1. Successful individualized instruction programs need not have a small class size. Fifty-two percent of the programs that were studied had a class size of 21 to 30 students. Although the median student/adult ratio was 10:1 for reading programs and 14:1 for mathematics programs, about 30% of the programs had a ratio greater than 20:1.

2. There seems to be no particular relationship between class size and class organization for instructional purposes. For example, the percentage of successful individualized programs having small-group or individual pursuit did not vary much regardless of class size.

3. Successful programs of individualized instruction can operate without a specially written individual plan or contract for each student. Only approximately 60% of the programs that were studied had such a document.

The procedures used to assess the effectiveness of individualized instruction programs were fairly traditional. Most of the tests used for program evaluation were commercial, norm-referenced, standardized achievement tests. Most neglected was the evaluation of noncognitive program objectives, with many programs stating such objectives but not reporting any attempt to assess the degree to which they were attained.

No highly informative literature exists on the appropriateness of using standardized or criterion-referenced tests to evaluate the effectiveness of individualized instruction programs. There is probably concern in this area, but so far the problem has not been directly addressed. The literature indicated, however, that while standardized tests are not ideal instruments for evaluating individualized programs, they are efficient and reliable, and they cover important aspects of reading and mathematics achievement reasonably well.

Report

Wright, Calvin E., and Yungho Kim. A Study of the Characteristics of Effective Individualized Instruction Programs. Menlo Park, Calif.: Educational Evaluation and Research, Inc. April 1977.

Contractor: Educational Evaluation and Research, Inc.
250 South Castanya Way
Menlo Park, California 94025

SYNTHESIS OF THE FINDINGS OF FEDERAL STUDIES OF ESEA TITLE I

Purpose

The investigation of compensatory education, and in particular of Title I, is best viewed in the context of the many prior attempts to find out how that system works. This project reviewed previous major evaluations of the Title I program to provide not only a synthesis of the results of the studies, but also a clear explanation of the many controversies surrounding the methods used in evaluating compensatory education.

Method

The review was carried out between October 1976 and July 1977. Discussions with NIE, reference to earlier attempts at synthesis, recommendations of leaders in the field, and a search of ERIC led to the selection of the major studies to be reviewed. References to some of the other corroborative studies were added where appropriate.

Each of the 15 summaries of previous studies produced relied mainly on quotations from original final reports, but the information was recategorized to aid comparison between studies. The synthesis of the results of the studies focused on four areas:

1. Assessments of the extent to which participating students were properly selected

2. The types of treatments delivered to students under the name of compensatory education

3. The effectiveness of treatments in dealing with the needs of educationally disadvantaged children

4. The major problems in Title I implementation

The many methodological controversies were discussed as they related to 10 large evaluation issues within the categories of design, sampling, measurement, and analysis. As a result of the review of methodological controversies, 27 recommendations were made concerning the future of evaluating compensatory education.

Findings

Two types of results from this review can be summarized: substantive findings and methodological findings.

The first substantive findings concerned participant selection. The preponderance of evidence indicated that, generally, participating students were both economically and educationally disadvantaged. The match was far from perfect, however, possibly due to the difficulty of reaching disadvantaged children in neighborhoods not generally impoverished. Substantive findings on treatment delivery were characterized by diversity. Project goals range from increasing cognitive achievement to building self-image; teachers, parents, peer tutors, reading specialists, and teachers' aides help deliver compensatory education to children; subject matter includes primarily reading and mathematics but also cultural enrichment; environments range from regular classrooms and special classrooms to the home and special laboratories; environments are open or structured, individualized or in groups; and activities include kits of special lessons, audiovisual experiences, games, dramatics, paying children to learn, parent training, and counseling. The primary focus of Title I has been on directly improving reading and language skills of children in the primary grades, and that focus has increased over the period of Title I operation.

Concerning overall effectiveness, the existing studies have not provided conclusive evidence. While it appears that students in Title I have neither caught up to their group norms nor fallen further behind than they would have without the program, it is not clear whether they are gaining at all on their peers. Concerning differential effectiveness of different treatments, the results of field evaluations are particularly weak because of the many threats to validity that occur when treatments cannot be assigned randomly to students as they would be in an experiment. One result, however, has been found with some regularity: involvement of parents in teaching their children is important.

Seven major problems remain for the Title I system to solve: improving the interpretability of regulations, improving the validity of evaluations, finding ways to assure parent involvement, finding ways to reach all disadvantaged children, developing more effective methods of delivering compensatory education, developing a strategy for continued improvement of methods, and developing a strategy for building on individual differences in processes of acquiring cognitive skills.

On the methodological aspect of the review, 27 recommendations for improving evaluation emerged. The most important of these were:

1. Future evaluations of the impact of compensatory education should include comparisons of participating children's achievement against a priori, or absolute, standards of expected achievement as well as, or instead of, relative comparisons against the performance of statistically equated comparison groups.

2. Long-term longitudinal studies, making use of overlapping cohorts where possible, are necessary to evaluate the ultimate impact of Title I.

3. The use of quantitatively representative samples should be limited to instances where the information need is for quantitative estimates of program operating characteristics; in other cases, such as testing hypotheses about relationships, other sampling methods are more efficient.

4. Achievement data in compensatory education evaluation should be interpreted in terms of models of cognitive growth processes. In order for this to occur, further research in basic skills is necessary, and the results of that research must be adapted for use in evaluation studies.

5. Analysis of covariance is a reasonable method for carrying out comparisons of nonequivalent groups, but only if supplemented

by subsidiary analyses that investigate, among other things: (1) the reliability of covariates; (2) the residual nonequivalence after partialing out the effects of covariates; (3) the functional form of the regression function; and (4) the sensitivity of conclusions to violations in the assumptions that remain untested.

A great deal has been learned about compensatory education and about educational evaluation in the period since 1965. It is important to view this period as a formative one and to build on it to provide adequate education and adequate evaluation in the 1980's.

Reports

McLaughlin, Donald H. Title I, 1965-1975: A Synthesis of the Findings of Federal Studies. Palo Alto, Calif.: American Institutes for Research. 1977.

McLaughlin, Donald H., Kevin J. Gilmartin, and Robert J. Rossi. Controversies in the Evaluation of Compensatory Education. Palo Alto, Calif.: American Institutes for Research. 1977.

Rossi, Robert J., Donald H. McLaughlin, Emily A. Campbell, and Bruce E. Everett. Summaries of Major Title I Evaluations. Palo Alto, Calif.: American Institutes for Research. 1977.

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RESEARCH ON THE EFFECTIVENESS OF COMPENSATORY EDUCATION PROGRAMS: A REANALYSIS OF DATA

Purpose

Few studies of compensatory education have investigated the issue of sustained efforts, and most of these are restricted to preschool programs. The purpose of this research is to reanalyze previously collected evaluation data to estimate whether or not the impact of compensatory services at the elementary school level is sustained.

Method

For each of four compensatory education programs, achievement gains were calculated based on at least two periods of time: the traditional fall pretest to spring posttest (school year) evaluation period, and a 12-month, fall-to-fall period that included the summer following the program. Then conclusions were drawn about program effectiveness based on three standards for success, and the conclusions for the different time periods were compared. These standards are derived from those previously used in evaluating compensatory education programs and use the norms of standardized tests as the frame of reference. Two of the standards are expressed in grade equivalents: a rate of gain of 1 grade-equivalent month for each month in the program and an annual rate of 8 months. The third standard is a gain of 10 percentile points. In the absence of information on the expected achievement of disadvantaged students without compensatory education experience, the investigators did not select a "best" standard, but rather demonstrated the extent to which conclusions about effectiveness differ according to the standard and the period of time used.

Findings

The primary finding of these analyses is that conclusions about program effectiveness, regardless of what standard is used, are greatly influenced by the period of time over which the program is judged. Specifically, the inclusion of the summer months in the evaluation can substantially reduce estimates of achievement and often reverse positive judgments of program effectiveness. This results from the fact that losses in achievement often occur over the summer. In three of the four data sets presented, gains during the school year were followed by losses over the summer. In the fourth, although there was not an actual achievement loss over the summer, there was a reduction in rate of achievement.

Different standards for success can result in different conclusions about program effectiveness. The research has not explicity compared the standards with each other since the primary interest was the effect of the time period on each standard. Nevertheless, the 10-percentile-point standard is more stringent than the two standards that entail grade-equivalent scores and thus is less likely to be met, especially during the 12-month, fall-to-fall evaluation.

The extent to which individuals in each sample follow the pattern discovered in the means was investigated. In the five samples studied, the achievement patterns of a majority of the

individual students were the same as the patterns of the means. It can be concluded, therefore, that the consistent finding of school year gains and summer losses is not a function of a small number of individuals in the sample with large summer losses.

The relationship between the size of the school year gain and the size of the summer gain (usually loss) for individuals was also studied. Although the correlations describing this relationship are fraught with measurement error, they were large enough to indicate that there is an association between amount of school year gain and summer loss. Specifically, students who gain the most over the school year tend to be those who lose the most over the summer. However, analyses of the relationship between school year gain and 12-month gain suggest that the ranking of students by size of gain does not shift dramatically from the end of one school year to the beginning of the next.

These data represent the only attempt to address the issue of summer loss with several longitudinal data sets, thereby eliminating the confounding introduced by cross-sectional data. Although only four data sets were analyzed, they represent different programs, age levels, subjects, tests, and schools. The findings of summer losses are quite consistent across all of these variables. Combined with questions raised by previous research, such as the inconsistencies between school year evaluation results and the results of annual statewide testing programs, the existence of summer losses appears to be quite common for educationally disadvantaged students. Therefore, this phenomenon should be taken into account in designing and carrying out evaluations of compensatory education programs.

It should be noted that the data demonstrate that programs can show evidence of sustained effects. Hence, a longer evaluation time period does not imply that all programs would be judged ineffective.

Report

David, Jane L., and Sol H. Pelavin. Research on the Effectiveness of Compensatory Education Programs: A Reanalysis of Data. Menlo Park, Calif.: SRI International. 1977.

Contractor: SRI International
333 Ravenswood Avenue
Menlo Park, California 94025

DISTRIBUTION AND CONCENTRATION OF TITLE I FUNDS IN NEW JERSEY

Purpose

Title I of the Elementary and Secondary Education Act of 1965 (ESEA) was enacted "to provide financial assistance to Local Educational Agencies serving areas with concentrations of children from low-income families to expand and improve their educational programs by various means which contribute particularly to meeting the special education needs of educationally deprived children."

New Jersey received for fiscal year 1975-76 approximately $49 million to be used for ESEA Title I projects. Presently, little is known concerning the distribution and particularly the effect of the dispersal and use of these Title I funds on educational achievement. To address these problems, an extensive New Jersey ESEA Title I data base for 1975-76 was designed and developed. In the present research, this data base was used in conjunction with other data bases to determine the effect of the Title I program.

Method

The project consisted of two distinct segments: data collection, and analysis and presentation of the information.

Data Collection. Each fiscal year, local educational agencies (LEAs) that are applying for ESEA Title I funds are required to submit to the New Jersey Department of Education an extensive and detailed application form. The Title I data base was developed from information contained in these applications.

Two types of data were collected--school district information and school information. The district data included information concerning Title I eligibility, program enrollment, staffing, and budgets. The school information included program enrollment and staffing data.

These data bases were then merged with the following existing New Jersey Department of Education data bases: (1) the 1975 New Jersey Educational Assessment Program's Statewide Reading and Mathematics Test results; (2) Federal programs disseminated in New Jersey; and (3) the New Jersey school district demographic data base. In this manner, a comprehensive ESEA Title I data base was developed.

Data Analysis and Presentation. A variety of descriptive statistics were developed from the data. Additionally, correlational analyses were performed to determine whether relationships

existed between the Title I data, testing data, and program dissemination data.

Findings

Certain general relationships between ESEA Title I and educational achievement were evidenced.

1. Those LEAs with higher average staff Title I salaries were usually the ones with the poorer performing students in both reading and mathematics. The key to this relationship lies in the definition of a large average salary figure. Where a high average salary figure represents high pay to few staff members, it may be concluded that a small Title I staff is not effectively meeting the academic needs of the students.

2. There was an inverse relationship between achievement and student/instructor ratio. This relationship strengthens the conclusions drawn from the relationship between achievement and salary per instructor. Those LEAs with a larger ratio (i.e., fewer instructors to serve the students) were the poorer performing LEAs. This result, when taken in context with the achievement/salary-per-instructor correlation, may indicate that those LEAs with a small but well-paid Title I staff are not adequately meeting the student needs. There should be a larger staff, resulting in a smaller student/instructor ratio.

3. There was a generally positive relationship between achievement and time spent per instructor in Title I instruction. This may indicate that those schools allotting more time per student per instructor for Title I instruction were the better performing schools. The results indicate that perhaps more time allotted for these additional reading and mathematics programs could result in increased achievement levels for the students.

4. Except for isolated instances, there was no relationship between achievement and number of innovative programs adopted or adapted. This may, however, be an artifact of the data. There was not a large variability between achievement and number of programs, which may cause spurious correlations.

Report

Koffler, Stephen L. An Analysis of Title I Data in New Jersey. Trenton, N.J.: New Jersey Department of Education. 1976.

Contractor: New Jersey Department of Education
225 West State Street
Trenton, New Jersey 08625

CHAPTER IV. RESEARCH ON ADMINISTRATION

SURVEY OF TITLE I LEGAL STANDARDS

Purpose

The study's basic research objective was to determine what additions, deletions, and modifications to the Title I statute and regulations are needed to improve program administration. Specifically, the contractor analyzed the necessity, sufficiency, consistency, clarity, and restrictiveness of the Title I legal framework pertaining to:

1. The requirements school districts must satisfy to receive assistance under Title I (e.g., eligibility and targeting of children and school attendance areas, program design, concentration, comparability, supplanting, and parent involvement)

2. Functions performed by state educational agencies (SEAs) (e.g., application approval, technical assistance, monitoring, and enforcement)

3. The relationship between Title I and state compensatory education programs

Method

The project's analysis of Title I began in July 1975. The first task was to compile and analyze the following documents:

1. Title I statute

2. General Education Provisions Act (GEPA)

3. Legislative history (committee reports and floor debate)

4. Current Title I and GEPA regulations

5. Old Title I regulations

6. Title I program directives (program guides)

7. U.S. Office of Education (OE) program support packages

8. Internal OE memoranda

9. OE correspondence with States and local school districts

Based on this analysis, a paper was prepared entitled "A Description of Title I, ESEA Legal Framework and Preliminary Analysis of the LEA Program Requirements." Upon completion of this paper, the second stage of the project commenced. A survey of how 10 States interpreted the Title I requirements was begun.

The survey reviewed written policy statements developed by the States, and preliminary determinations were made concerning, among other things, (1) the substance and extent of state regulations, and (2) the comprehensiveness, internal consistency, and specificity of these state regulations, and their consistency with the Federal legal framework.

In addition to studying the States' legal frameworks, approximately 1 week was spent in each State interviewing a wide range of state officials responsible for the administration of Title I, including Title I directors and their staffs, auditors, and legal counsel. These interviews were conducted between December 1975 and March 1976.

The interviews conducted in the 10 States attempted to determine: (1) the accuracy of the preliminary analysis; (2) state interpretations concerning areas which, based on a preliminary reading of the Title I statute, regulations, guidelines, and handbooks, might be thought to be ambiguous; (3) perceived problems with the legal framework; and (4) areas which SEAs felt were most important to realizing the purposes of NIE.

The final step in satisfying the basic research objective was the preparation of four policy papers. Each paper contains, with respect to the topics it discusses:

1. A description of the major applicable legal requirements (using nonlegal terminology)
2. An explanation of the purpose of each requirement, including references to relevant portions of the legislative and regulatory history
3. An analysis of the interrelationships among requirements
4. Examples of policies developed by 10 States
5. Model questions for Title I application forms, application checklists, and monitoring instruments
6. Recommendations for improving the clarity of the regulations and reducing the restrictive aspects of Title I

Findings

Although the papers concern different aspects of the Title I legal framework, several general conclusions can be stated. First, with few exceptions, the overall structure of Title I is sound; i.e., the existing requirements set forth in the statute and regulations maximize the likelihood that the Title I funds will satisfy the legislative purpose of providing financial assistance to local school districts to expand and improve the educational programs for educationally deprived children residing in low-income areas. Second, OE's interpretations (1) are generally consistent with the statute, (2) are internally consistent (i.e., complying with one requirement does not require contravening a second requirement), and (3) permit maximum flexibility consistent with the legislative purposes of Title I. Third, the regulations contain general statements of policy but do not explain how these policies are to be applied in commonly occurring situations; instead, these explanations appeared in guidelines, handbooks, and correspondence, all of which have been officially superseded. Thus, the regulations are not sufficiently clear; i.e., States and local school districts do not understand the range of acceptable and unacceptable practices under Title I. One of the major effects of this lack of clarity is that some state and local school districts are pursuing overly restrictive practices not prescribed by Title I. This research concludes that increased clarity in the regulations would result in increased awareness by LEAs of the flexibility that the legal framework grants them in designing Title I programs.

The four reports contain numerous recommendations for statutory and regulatory modifications.

Reports

Gaffney, Michael, Catherine Thomas, and Robert Silverstein. An Analysis of the Legal Framework for State Administration of Title I of the Elementary and Secondary Education Act of 1965. Washington, D.C.: Lawyers' Committee for Civil Rights Under Law. September 1977.

Silverstein, Robert. An Introductory Overview Concerning the Basis for and Clarity and Restrictiveness of the Program Requirements Applicable to Local School Districts Applying for Grants Under Title I, ESEA. Washington, D.C.: Lawyers' Committee for Civil Rights Under Law. September 1977.

Silverstein, Robert, Michael Gaffney, David Long, Ellen Mattleman, Carol Morgan, and Daniel M. Schember. A Description of the Title I, ESEA Legal Framework. Washington, D.C.: Lawyers' Committee for Civil Rights Under Law. September 1977.

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STUDY OF THE ADMINISTRATION OF TITLE I IN 8 STATES AND 32 SCHOOL DISTRICTS

Purpose

This project is a comparative analysis of case studies of the administration and implementation of ESEA Title I in 8 States and 32 local school districts, 4 in each State. The broad purpose of this comparative analysis is to provide the National Institute of Education (NIE) and the Congress with an understanding of the ways in which and the extent to which Federal and state administrative activities and practices influence the management of Title I programs at the local level. More directly, this study was designed to accomplish the following:

1. Determine the nature of state administrative policies and practices
2. Analyze the factors influencing different state Title I administrative policies and practices and the consequences of such differences for local Title I administration
3. Suggest appropriate future Federal administrative strategies, encompassing possible changes in Federal Title I legislation, regulations, guidelines, and administrative procedures

The study examined the extent to which the structure of Title I administration--legislative provisions, program regulations of the Department of Health, Education, and Welfare, and Federal and state administrative procedures--can and do lead to well-administered Title I programs at the local level. It examined the structural linkages that constitute Title I's intergovernmental system; it sought to illuminate the nature and quality of the relationship between the Federal Government and the States, between the States and their school districts, between the school districts and their Title I schools, and between school administrators, teachers, teachers' aides, parents, and Title I pupils.

Method

Over 1,200 interviews were conducted and a comparable number of documents reviewed regarding Title I administration in 8 States, 32 districts, and 116 schools. In selecting the agencies and schools to be included in the case studies, the primary objective was to maximize the extent to which key contextual and administrative characteristics were represented. Important factors in selecting States included reported performance on U.S. Office of Education evaluations, geographical location, metropolitan/rural character, presence of a state compensatory education program, state political culture, inclusion in other NIE Title I studies, state educational agency (SEA) organizational characteristics, and special problems associated with individual States. Local district selection objectives were as follows:

1. One large urban local educational agency (LEA); where possible, the largest in the State
2. Two middle-sized urban LEAs
3. One relatively small LEA in a rural area

A number of criteria were utilized in selecting Title I schools within each district. The selection criteria utilized for school selection included: grade level and span; size of school; populations (ethnic) served; subdistrict distribution; principal's tenure and degree of perceived leadership; Parent Advisory Council involvement; program emphases; years as a Title I school; participation in the State's compensatory education program; and status regarding Title I regulatory compliance ("exemplary," problem areas, change over time, etc.).

To determine program structures and organizations, the study teams sought to ascertain approaches, emphases, and practices related to these areas of management: planning and policymaking; fiscal allocation and budgeting; technical assistance; monitoring; and dissemination/interpretation. The annual application/proposal process was also carefully examined.

Eight Title I regulatory areas, four relating to funds allocation and four emphasizing program development, were selected for special attention across the eight case studies. These were as follows:

Funds Allocation Issue Areas

1. School selection
2. Student selection
3. Concentration of effort
4. Comparability

Program Development Issue Areas

1. Needs development
2. Program design
3. Parental involvement
4. Evaluation

Occasionally other regulatory areas, such as general aid, supplanting, coordination, and nonpublic school participation, were addressed.

Findings

Although considerable improvement in the administrative performance of SEAs and LEAs has been evidenced in the last 5 to 7 years, this study indicates that attention to the Title I regulations has been decidedly uneven and that administrative effectiveness varies considerably in the eight States studied. The study also found that the current Federal role is often an important factor in influencing the nature of basic state Title I approaches to administration.

The following are major conclusions drawn regarding the trengths and weaknesses of the Federal Government's current Title I orientation and policies:

1. The basic framework of the current regulations must be preserved to assure the attainment of Federal goals.

The regulations, when enforced, provide the foundation for effective administration of Title I programs. They have thus far succeeded in establishing and protecting the existence of categorical Title I programs against countervailing influences in local and state settings. Without the compliance categories of the Federal Title I regulations, the interests of educationally disadvantaged populations stand in clear danger of being displaced, by districts and States, in favor of competing interests. However, serious effort must be made to clarify state and local understanding of the requirements in order to clear up remaining compliance problems, overcome rigid responses to Federal expectations, and promote program designs in keeping with local resources and needs.

2. The intergovernmental relationships that function in Title I in the mid-1970's should not be viewed as unrelenting combat between the Federal Government and state educational agencies, between SEAs and their LEAs, or between those who accept the principles of compensatory education and those who wish to use the funds for other purposes.

Insufficient knowledge and managerial capacity and a number of legitimate local factors and concerns contribute to problems of Title I program administration. Improving program implementation over the next decade must begin with the discovery of state and local resources, needs, attitudes, knowledge levels, and administrative capacity. The majority of state and local administrators contacted during this study exhibited a positive attitude toward managing the Title I program more efficiently, in basic compliance with Federal regulations and in a way that maximizes the probability of effective educational programs. A combative administrative style and the overt use of authority seem productive only where States or local districts refuse to comply with regulations or refuse to make efforts to improve the effectiveness of their programs. Where States and districts are cooperative, productive intergovernmental relationships may require keeping the use of overt authority and sanctions in reserve.

3. During the last few years, sufficient improvement has been made in program administration in many States and local districts to justify confidence in the basic intergovernmental administrative model embodied in the legislation.

The contractor feels that while no major, fundamental change in assumptions is warranted, a number of modifications should be considered in order to enhance both accountability and program flexibility.

4. Most of the 8 States and 32 LEAs studied manage Title I in a manner generally consistent with Federal expectations and in a manner that has been strongly influenced by the Federal Government.

Some of the States and local districts are administering the Title I program in a manner that is highly incompatible with Federal expectations, but these seem to be in the minority. The large majority of SEAs and LEAs in this study are sufficiently well motivated, structured, and staffed that they can meet satisfactorily most current Federal expectations. Problems remaining in these States and districts are, for the most part, in areas where Federal expectations are either not clearly understood or too modest.

5. Federal influence has been largely effective in inducing States and districts to address funds allocation responsibilities; it has been far less effective in inducing States and districts to attend to program development responsibilities.

The Federal Government has been successful in fostering the development of a basic system of state and local policies and procedures for achieving accountability in the funds allocation area. This system needs further refinement to maximize state and local performance. However, the system that has evolved is not currently equipped (in terms of motivation, knowledge, and capacity) to deal effectively with issues of program development. This deficiency is reflected in a general lack of systematic and sustained attention to these important responsibilities of States and local districts.

6. The role orientation exhibited by an SEA is the most critical determinant of its administrative performance and the nature of LEA responses to state administrative initiatives.

The Federal Government's interests are best served when state educational agencies share Federal program goals and exert leadership to assure compliance and program effectiveness. Ideally, the Federal Government should attempt to change the role orientation of States that currently view their Title I responsibilities as an administrative chore rather than a leadership opportunity. Though state and local contextual factors will probably make uniform attainment of that objective impossible, it appears entirely possible that the Federal Government can significantly affect an SEA's role orientation provided certain administrative policies and procedures are changed at the Federal, state, and district levels.

Report

Goettel, Robert J., Bernard A. Kaplan, and Martin E. Orland. Synthesis Report—A Comparative Analysis of ESEA Title I, in Eight States. Syracuse, N.Y.: Syracuse Research Corporation. October 1977.

Contractor: Syracuse Research Corporation
Merrill Lane
Syracuse, New York 13210

STUDY OF STATE ADMINISTRATION OF TITLE I[1]

Purpose

State educational agencies (SEAs) receive little specific direction from the Federal Government regarding how they should be organized or staffed for purposes of Title I administration. State administrative patterns, therefore, have become individually designed to meet the specific needs of each State. This study's objective was to define the variation in how States administer Title I, assess any differences this variation makes, and delineate the factors which appear to account for these differences. Specific study questions included:

1. How do States administer Title I in terms of staffing, activities, and relationships with local educational agencies (LEAs)?

2. Are there statistically predictable relationships between, for example, the use of set-asides or the existence of particular features (such as a state compensatory education program) and the level or type of SEA Title I administrative activity?

3. Are there particular patterns of SEA Title I administration that appear to be most effective in assuring compliance at the local level?

Method

The basis of this project was data collected through on-site interviews of Title I directors in 46 States. The survey contained 98 questions (most of which were closed-ended) divided into two major areas:

1. SEA provisions concerning the interpretation and dissemination of U.S. Office of Education (OE) and state regulations; monitoring and enforcement of these regulations; and technical assistance received

2. Characteristics of the state Title I office concerning staff characteristics and utilization; relationship of the state office to OE; the existence of a state-funded compensatory education program; and the overall administration of Title I

After responses were verified, the results were put into a data base for use in subsequent analysis. There were several levels of analysis, ranging from simple frequency distributions to fairly complex regression analyses to determine the relationship of particular dependent and inde-

[1] Data from this study are being placed in an archive. A description of the archive project may be found on p. 55.

pendent variables. The large number of data items (over 500) and observations (46 States) required that analysis proceed in an iterative sequence limiting the hypotheses to be explored and refining the analytic techniques from one step to the next.

Findings

See Chapter IV of the report listed below.

Report

National Institute of Education. Administration of Compensatory Education. Washington, D.C.: The National Institute of Education, U.S. Department of Health, Education, and Welfare. September 30, 1977.

Contractors: Booz, Allen and Hamilton, Inc.
1025 Connecticut Avenue, N.W.
Washington, D.C. 20036

National Opinion Research Center
6030 South Ellis Avenue
Chicago, Illinois 60637

Policy Research Corporation
35 East Wacker Drive
Chicago, Illinois 60601

STUDY OF FEDERAL ADMINISTRATION OF TITLE I

Purpose

This study was designed to assess the clarity and consistency of the Federal Government's efforts to apply the Title I legal framework in the day-to-day operation of the program. The research provides Congress with information about possible modification of the Federal Title I administrative machinery.

Method

The research focused on those provisions in the Title I legal framework which relate to the supplementary nature of the Title I program. Staff of the National Institute of Education Compensatory Education Division collected the data through a review of Title I audits and program reviews and of other official communications between the Federal Government, States, and LEAs, as well as through extensive interviews with officials at various levels responsible for the Federal administration of Title I.

Findings

See Chapter III of the report listed below.

Report

National Institute of Education. Administration of Compensatory Education. Washington, D.C.: The National Institute of Education, U.S. Department of Health, Education, and Welfare. September 30, 1977.

TITLE I AND STATE COMPENSATORY EDUCATION PROGRAMS

Purpose

As part of its survey of compensatory education, the Congress asked the National Institute of Education (NIE) to study the characteristics of state programs. The study of state compensatory education was designed to provide:

1. Descriptions of state compensatory education programs currently in operation, including funding, services provided, and administration

2. A discussion of whether the programs provide possible models for Title I

3. A discussion of the extent to which Title I currently affects state incentives to introduce compensatory programs and to operate them efficiently

Method

NIE collected detailed written descriptions of compensatory education programs from 14 of the States currently funding them, conducted interviews with the personnel in these States, and held conferences with state and local program coordinators to discuss the operation of state programs and their relationship to Title I.

Findings

Funding and Eligibility. In fiscal year 1976, 16 States allocated more than $364 million for the education of children disadvantaged by virtue of poverty, language, level of academic achievement, or location. Funding levels among the States vary considerably, although some States provide nearly 40% of the combined Federal and state funding for compensatory education. These funds are most often allocated to

the school districts on the basis of a formula; however, two States, Washington and Wisconsin, award grants on the basis of competitive application. While most States allocate funds on the basis of economic disadvantage, Michigan and New York allocate solely on the basis of achievement criteria.

Services. Services provided through state programs resemble those provided under Title I. Usually funds are used to provide reading and mathematics instruction for children at the elementary level. Some districts and States might fund programs to meet unique needs of bilingual education or other pressing concerns.

Administration. States invest little time, effort, or money in the administration of their own programs. When States do attempt to administer their programs, they rely heavily on Title I to subsidize their administration. One consequence of the relatively low funding for administration is that monitoring of the degree to which services funded by state compensatory education programs are supplementary is almost nonexistent. Even in States that expressly require state funds to be used for supplemental services, districts carry the burden of ensuring supplementation.

Relationship with Title I. Title I does not interfere with the state compensatory programs except where Title I itself is difficult to implement. In interviews, coordinators of state programs stressed that Title I was necessary for the success of their own effort. Without Title I, they argued, few States would have initiated, or would continue, funding programs for the disadvantaged.

Conclusion. State programs have been established in almost one-third of the States and provide a significant level of funding. In general, they target funds to the same type of pupils and provide the same type of services. These programs thus provide services that complement and augment Title I. However, their continued growth is not assured. In a time of general fiscal crisis in education, it is unlikely that many more States will initiate major compensatory education programs.

Report

National Institute of Education. Administration of Compensatory Education, Chapter V. Washington, D.C.: The National Institute of Education, U.S. Department of Health, Education, and Welfare. September 30, 1977.

JOHNSON COUNTY TITLE I DESEGREGATION STUDY

Purpose

This is a case study of a city/county merger plus desegregation. It was done to examine the functioning of the merged district within the context of existing Title I regulations. It was seen as an opportunity to examine the extent to which current Title I regulations accommodate the needs of such districts.

Method

Nine local, two state, and three Federal Title I administrators were interviewed concerning the problems caused and alleviated by Title I regulations. Phase I of the study involved identification by local Title I administrators of regulations causing problems and those helping to solve problems. Phase II involved soliciting opinions on the issues identified in Phase I by local, state, and Federal Title I administrators.

Findings

Overall, there was little clear consensus. Examples of issues addressed are:

1. Continuous Eligibility of Students. Many administrators favored having Title I "follow the child" to accomplish this in order to lend stability in a changing educational program. Others felt it would not lend stability.

2. Needs Assessment. The discussion hinged upon the follow-the-child issue. When are needs to be assessed, before or after bussing?

3. Identification of Title I Recipients (Schools and Students). Local administrators found definitions to be unclear.

4. Evaluation of Students' Progress. This was the most controversial issue. Standardized tests were both lauded and condemned. Alternatives were offered or found wanting.

5. Teachers' Aides. While there was substantial agreement that districts should decide how, where, and when to use teachers' aides, there was disagreement on the capabilities of principals and

teachers to select or use aides and on the abilities of the available aides to be truly helpful in classrooms.

6. Parent Advisory Council. The PAC was seen as useful. Problems included greater sophistication of the city over the county PAC (and consequent rivalry); the need for training of PAC members; and the need for the district to be more serious in its parent involvement efforts.

7. Title I aided Johnson County in forcing a degree of planning and communication.

8. Title I was also an inflexible program; it had to be worked around in times of major change, when flexibility was strongly desired.

Report

Thiemann, Francis C., and John A. DeFlaminis. Johnson County Title I Desegregation Study: The Final Report. Louisville, Ky.: University of Louisville. 1977.

Contractor: Education Consortium
675 River City Mall
Louisville, Kentucky 40202

SELECTING EDUCATIONALLY DEPRIVED CHILDREN FOR TITLE I: A REVIEW OF THE LEGAL ISSUES

Purpose

The project sought to identify and evaluate the major legal issues raised by the needs assessment, pupil selection, and program formulation aspects of the Title I process. The purpose of this analysis was to determine in what respects Title I might be vulnerable to legal challenges, as well as to suggest changes in statute, regulation, or implementation procedures.

Method

The project was organized to:

1. Describe relevant aspects of the Title I statute and regulations

2. Provide a closer look, drawn from prior and contemporaneous studies commissioned by NIE, at the actual implementation of needs assessment, pupil selection, and program formulation

3. Sketch the general legal context in which challenges to Title I will be resolved

4. Analyze and assess specific legal challenges

5. State conclusions about likely developments in the legal responses to Title I challenges

Findings

Recent developments in the Federal courts, as to both procedural and substantive matters, will make legal challenges to Title I generally more difficult. These developments include narrowing interpretations of standing to sue, jurisdiction of the courts, adjudicability of legal issues likely to be presented, the impact of racially disproportionate results of governmental action, and the facts necessary to demonstrate the requisite liberty or property interests for invoking due process protections.

In general, broad, constitutionally based challenges to fundamental aspects of Title I pupil selection will be unlikely to prevail. This includes challenges such as the invalidity of pupil classification per se, the lack of geographical and other uniformity of application of Title I, and the vagueness of some of Title I's operational terms. The alleged absence of adequate procedural due process protections for students may pose more difficult questions for the courts.

Narrower challenges addressed to specific deficiencies in Title I pupil selection procedures, and especially to failures of Federal, state, and local agencies to comply with the letter or spirit of Title I and its regulations, are more likely to succeed in the courts. Many of the areas of vulnerability are being identified by other NIE projects. These include evidence of inadequacies in aspects of needs assessment, pupil selection, program implementation, and evaluation.

To the extent that adequate regulatory and administrative changes are made in response to well-founded criticisms of Title I, its vulnerability to legal challenges will be reduced. Failure to implement such changes will provide a basis for likely judicial intervention.

Report

Tractenberg, Paul L. Selecting Educationally

Deprived Children for Title I: A Review of the Legal Issues. Newark, N.J. 1977.

Contractor: Paul L. Tractenberg
Rutgers School of Law
180 University Avenue
Newark, New Jersey 07102

VARIABLES THAT AFFECT THE ADMINISTRATION AND COORDINATION OF COMPENSATORY EDUCATION PROGRAMS

Purpose

The purpose of this project was to identify factors affecting the administration and coordination of compensatory education programs. The primary purpose of administration is to provide resources and conditions for effective teaching. A significant measure of effective teaching is the level of satisfaction as indicated by teachers. In this study, the term "teacher satisfaction" means a high correlation between teachers' perceptions of idec and real conditions in their working environment. This study also attempts to identify the various administrative variables in compensatory education programs that lead to effective teaching and teacher satisfaction.

Method

The method used in this study was to review and compare the research findings which explored the relationship between teacher satisfaction and administration. Operating out of the basic tenets of the work of Mayo and his associates at Harvard and the commentaries of Barnard and Follett, great attention was given to concern for the social aspects of administration and the responsibility of the administrator to provide activities that fulfill the needs of individual staff members while effectively advancing the organization toward its goals.

Findings

Four instruments are suggested for carrying out research on the administrative variables that affect compensatory education programs:

1. The National Education Association (NEA) Needs Assessment Instrument was designed to probe teachers' perceptions of needs. Based on a discrepancy model, it measures teachers' perceptions of ideal and real conditions in 18 categories. Categories are related to resources for teaching, program definition, professional role of the teacher, and administration support.

2. The Dialogue, Decision-making, Action and Evaluation (DDAE) questionnaire was developed by I/D/E/A for use in the League of Cooperating Schools. Questions are clustered around the concepts of dialogue, decisionmaking, action, and evaluation at the school level. The focus of the questionnaire is on the professional role of the teacher.

3. Decision point analysis, developed by Eye and others, can be used as a supplement to the DDAE questionnaire for exploring the professional role of the teacher. It is a discrepancy measure that can be used to determine perceptions of where decisions should be made in a school system.

4. The Organization Climate Description questionnaire (Halpin and Croft) assesses eight categories: disengagement, hindrance, esprit, intimacy, aloofness, production emphasis, thrust, and consideration.

No claim is made that this is a comprehensive set of instruments. However, the results of research studies, program evaluations, and project findings seem sufficient to give sound direction—tempered by the logic of professional experience and perceptions of concerned educators—for identifying the variables that affect the administration and coordination of compensatory education programs.

The results of the review and comparison led to the development of four categories affecting the administration and coordination of compensatory education programs.

1. Program Definition. A major function of administration is planning which results in a clear program definition, including objectives to be achieved, a description of various means for achieving the goals, and an evaluation system which is ongoing and used for constant feedback for refining and redefining the program. Program definitions must have commit-

ment from and be understood by teachers, administrators, parents, and students.

2. Resources for Teaching. The resources necessary for teachers to carry out their jobs is a major responsibility of the administration. In compensatory education programs, the need for planning time is essential in order to meet the diverse needs of students. This planning time must be adequate and free of interruptions if teaching is to be both focused and sustained. Class size must be manageable and workable. Adequate staffing is necessary, as well as instructional materials, equipment, and facilities for teaching, if teachers are to be effective in their work.

3. Teacher Roles. These should include full participation of teachers in planning and decisionmaking in a system oriented to realistically assessing its own problems and potential characterized by:

   a. participation in planning and decisionmaking;

   b. responsibility for making decisions about the instructional program in their classrooms; and

   c. school system and administrative leadership oriented to a problem-solving approach to planning and decisionmaking.

4. Administrative Supports for Teachers. The most important activity in any educational enterprise is teaching. The most crucial group in the educational enterprise is teachers. A major function of the administrative staff is to provide support for teachers. Administrative support is reflected in:

   a. cohesiveness of the faculty--they are part of a team;

   b. provisions for inservice training of teachers--training is job related, ongoing, and determined by the teachers;

   c. concern for the welfare of teachers--they are given fair and just salaries within the fiscal constraints of the program and are provided adequate and pleasant working conditions;

   d. fair practices of teacher evaluation--evaluation is designed not as a threat or punishment, but rather to help the teacher grow as a competent professional; and

   e. establishing sound working relationships with the community--there is community involvement in setting attainable goals for the program. Parents of students are assisted in understanding the program so that they can reinforce the teachings of the program.

Report

Variables Which Affect the Administration and Coordination of Compensatory Education Programs. Washington, D.C.: National Education Association. July 1975.

Contractor: National Education Association
1201 16th Street, N.W.
Washington, D.C. 20036

THE PAC STUDY

Purpose

This is an exploratory study of the impact of Parent Advisory Councils (PACs) on the management and administration of Title I programs at the local level. The study is intended not only to contribute to an assessment of the Title I program, but also to assist NIE generally in its policy planning regarding citizen participation.

Local, state, and Federal Title I officials acknowledge that there is wide variation in the types of management roles PACs play in local Title I programs. These officials have known PAC responsibility and influence to vary from virtually no involvement on the one hand to substantial influence over budget, hiring, and program design and evaluation on the other. This small

exploratory study will attempt to provide data on the causes of the variations in PAC activity and influence across districts to serve as a first step in developing studies of the role of PACs.

Method

Three districts in each of three States showing variations in the role and responsibility of PACs in relation to the administration and management of Title I programs were studied by using survey questionnaires. Respondents included principals of Title I schools, school-level PAC chairpersons, district-level PAC members, local and State Title I officials, school board members, superintendents, and participants in other community organizations. Analyses will be directed toward the following:

1. Comparing PAC roles and the levels of support provided by the local school, the district, and the State
2. Comparing district-level and school-level PAC members with local educational agency (LEA) staff
3. Comparing PAC roles with district and state policies on parent involvement in Title I programs

Lazarsfeld and Barton's method for generating "natural classes" will be used in assessing the information contained in the open-ended questions.

Findings

Findings will be reported in the fall of 1978.

Contractor: CPI Associates, Inc.
8435 North Steammons Freeway
Suite 120
Dallas, Texas 75247

PRELIMINARY WORK IN THE ADMINISTRATION OF ESEA TITLE I

Purpose

During the planning of the National Institute of Education (NIE) Compensatory Education Study, the dissemination and implementation of Title I regulations was often mentioned as a problem area by both practitioners and researchers with whom the NIE staff communicated. Information was especially lacking regarding the way regulations, both Federal and State, operate at the district level in nonurban areas. This project increased NIE's understanding of which regulations presented problems to local administrators and how these problems affected the nature of districts' Title I programs.

Method

In October 1975, two small conferences were held at NIE. Participants were superintendents, Title I directors, or other district personnel charged with the administration of Title I programs. The first conference focused on small rural school districts; the 11 districts represented ranged in size from 250 to 4,500 pupils. The 13 participants at the second conference came from small cities and, therefore, medium-sized districts, averaging 12,000 pupils. In total, 21 States were represented.

Each participant prepared a short paper addressing problems encountered in the administration of Title I in his or her district. NIE staff summarized remarks and led general discussions.

Findings

Problems with Title I Regulations

Parent Advisory Councils. Many small districts have difficulty persuading even a small number of parents to attend meetings, and advisory councils sometimes give little substantive input. Some parents feel that the school staff should assume full responsibility for program design, implementation, and evaluation. When smaller districts receive Federal funds for several programs, many of which require individual advisory councils, the parents who are willing to become involved may be burdened with numerous requests to attend meetings, frequently at considerable distance from their homes. Additionally, elected school advisory councils involve a large amount of administrative work and require voting so early in the school year that parents do not yet know one another. Despite these problems, many participants felt that advisory councils are particularly useful in protecting the interests of Title I children in communities where there are pressures to use funds for other purposes.

Supplanting. Participants felt that Title I programs cannot be wholly supplementary and still operate within the schoolday. Some States operated after-school or summer school Title I programs for a number of years in order to comply with their interpretation of this regulation. Other States discourage pullout programs during regular

school hours on the basis of supplanting regulations rather than educational considerations.

Comparability. The districts represented typically collected new records for this purpose and found data compilation a tedious, time-consuming process, particularly when a superintendent or school principal serves as Title I administrator as well as the administrator of several other federally funded programs. Comparability requirements present special difficulties for small districts which cover large geographic areas, since operating costs are often higher in remote schools.

Other problem areas. Conference participants also noted:

1. The concentration of services by many States on elementary school children when there is also a definite need at upper levels, especially junior high school

2. The frequent changes in both Federal and state regulations, which increase necessary record-keeping without deleting old requirements and often involve new data-gathering efforts; these changes present a special strain on small districts, where administrative money and staff are especially limited

3. The administrative chain of command which often puts Title I programs outside the jurisdiction of the school principal, thereby increasing the likelihood of poor coordination between Title I and regular school programs

4. The disparity between Federal auditors and Federal and state program personnel in interpreting regulations

5. That most States insist on standardized tests to fulfill Federal evaluation requirements; it was felt that such tests are of little help in evaluation or future planning since they do not reflect what happens in Title I programs

Problems with the Yearly Cycle of Due Dates

1. There is not enough planning time, and applications are due for the next year at about the same time evaluations are due for the present year, essentially eliminating the use of the most recent evaluations in the planning process.

2. There is a substantial time lag between submitting applications and their approval; often programs must be tentatively staffed and essentially geared up before approval is received.

3. The complexity of Title I application, evaluation, comparability, and fiscal requirements is a special problem in smaller districts. It leaves little or no time for administrators to engage in program research and follow-up.

The Role of the State Educational Agency (SEA) In Each District

1. Districts reported considerable variation in the amount of contact and technical assistance received from SEAs (ranging from productive monthly meetings of Title I coordinators in one State to no personal contact for as long as 3 years in another).

2. There was also considerable variation concerning the timely distribution and interpretation of regulations. Participants agreed that a single clear publication containing Federal regulations, guidelines, and handbook information would be extremely helpful.

Reports

The results of these conferences were used by NIE to guide further research in the administration of Title I programs.

CHAPTER V. ARCHIVE PROJECT

Purpose

The purpose of this project is to develop a National Institute of Education (NIE) Compensatory Education Study data archive. Given the large investment in data collection activities and the amount of new data collected in the course of the NIE study, it is very important that these data be available in usable form for researchers outside the Institute.

The archive will consist of the separate data files from six major projects conducted as part of the NIE study. The contractor will organize the files and develop uniform documentation and user's manuals for the archive data. The completed archive will then be turned over to an established archiving facility.

Included Projects

Research on Funds Allocation
- Tabulations of Poverty Statistics
  - Census Tabulation of Poverty Statistics
  - Modification of Federal Education Finance Model
- Research on the Effects of Demonstration Compensatory Education Projects
- A Study of Student Achievement Measures as Title I Eligibility Criteria

Research on Services
- NIE National Survey of Compensatory Education

Research on Student Development
- Instructional Dimensions Study

Research on Administration
- Study of State Administration of Title I